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ARTICLE XIII.

PHYSIOLOGICAL INCOMPATIBILITY OF THE RESPECTIVE SEXES OF OUR SPECIES.*

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MESSRS EDITORS:—Having made, as I believe, and as the editor of the *Scalpel* for January, '59, said, "the most important discovery ever made in physiological science;" and having reduced it to a highly practical simplicity, and being anxious that the sons and daughters of my country shall have the benefit of it as soon as may be practicable, I send for your *Journal* a brief exposition of it. As the history of a discovery, generally, furnishes the evidence, at least, of its probability, I will, therefore, make the history of this discovery my introduction.

In October, 1844, I was travelling in the State of Mississippi, and was taken sick on the road, so sick as to deem it prudent that I should seek some halting-place where I could be properly cared for, and, presently, I arrived at a small village, and drove to the door of a dry goods store and called for the proprietor. He appeared at the door, I informed him of my condition and desire to find a place where I could be properly cared for. He

* I do not mean by species the whole race, but a portion of it only.

responded, we have in this little community one of the best families known to this or, probably, any other country, and if they will receive you, and I think they will, you will not want for anything that an enlightened goodness can command. He indicated the house, I drove to it, and, luckily, I was received, for at a glance I perceived that the representation of the merchant was correct,—for the entire premises indicated the abode of plenty, comfort, and happiness. The host and hostess were in harmony with the surroundings; in personal health, development, and social kindness they were model representations of humanity. With all this, I did not feel entirely at ease. I saw no children, for I imagined their children, if any, to be miniature models of humanity. At length I ventured to ask the lady, if she had any children? She responded affirmatively, and added, "they are at school." In the evening, three little boys came in; and never have I been so much disappointed as I was at the sight of these children.

They were, respectively, afflicted with tabes mesenterica, in an advanced stage, and hence they were disgusting objects. The mother, I think, must have perceived my disappointment, and hence remarked: "my first three children are dead." Of what disease did they die? I inquired. She answered: "the first died of consumption of the lungs, and the other two of the bowels." As the parents had every indication of having a sound constitution and excellent health, and from the excellence of their residence and plentifulness on their table, I felt fully assured that their children had not been stinted in food, or exposed habitually, at any time, to a cold and humid atmosphere; and further, the country was exceedingly healthy, and believing at that time, as every body else did, that the consanguine relation of progenitors is mischievous to progeny, I asked the lady if she and her husband were cousins? She answered, "no, sir; there is no blood relation between us, and further, consumption was never known to have obtained in either his family or mine, and hence we are greatly surprised that our children should die of it." This case greatly puzzled me, and hence, during my sojourn with this family, I investigated every thing

and circumstance that could apparently hold any relation to them, but finding no apparently possible cause for the scrofula of their children, I was forced to the suspicion that it resulted from some physiological condition in the progenitors which was yet to be discovered, and I believed that it could be discovered by a sufficiently extensive observation of parents and children, and I resolved to make an effort to discover it; consequently I made a memorandum of all the obvious facts which this case furnished, including the temperaments of the parents, respectively. But I did not suspect that they had anything to do with it, because I regarded them as normal conditions, but I noted them simply as a circumstance, and because to do so would help my memory, for at this time, and for the eighteen previous years, the temperaments had, with me, in a great measure, been a specialty, and probably I was more practically familiar with them than any other individual ever was.

The parties were, respectively, of the *sanguine*, *bilious*, *lymphatic* temperament; and, to the extent of my ability to judge, I never saw a more physiological couple.

The weather being fine and my health restored, I started on my journey. About one o'clock I halted at an inn on the road side, for dinner. The host was a fine and soundly looking representative of the bilious encephalic temperament, and the hostess was the same,—a superior woman. I asked the host, if he had children? He answered: "I have." I informed him that I was making observations on parents and children, and would therefore be pleased to see his. He responded: "certainly, sir," and led the way to the nursery. Upon entering it, I saw two children; one was rachitic and the other imbecile. On leaving the nursery, he remarked: "our first child died of brain fever." From the condition of the two I saw, I suspected that the brain fever of the first was of the scrofulous variety. Upon returning to the parlor, I found the mother weeping over her maternal disappointments, and I sympathized deeply with her, because she was sufficiently endowed to have been the mother of statesmen. These parties assured me that there was no consanguinity between them, and that scrofula, in

no form, had ever, as they thought, been in the ancestry of either of them. Their circumstances indicated a comfortable independence, and, like the preceding family, they were sound, healthy, and lived in a healthy country.

Having dispatched a good dinner, I continued my journey, with my mind thoroughly perplexed. I meditated myself into fever and cephalagia, and hence, at an earlier hour than usual, arriving at an inn, I halted for the night. At my arrival the host appeared. His temperament was sanguine, bilious, which I regarded as being the most dense and enduring known to the species. The evening being pleasant, I seated myself on the piazza, and presently the hostess and seven children appeared, for my entertainment, possibly. Her constitution was bilious lymphatic; all the children had a sound, viable appearance, and the mother informed me that she had lost none. I found nothing here that appeared likely to aid in relieving my perplexity. My observation here, however, was not unprofitable. For it showed that for the production of a sound and viable progeny, that both progenitors need not have, in the abstract, the best constitution, for I did not think very favorably of her constitution, it was too watery. I now inquired of the hostess if she knew of any family who had been very unfortunate with their children. She answered: "I do. There lives a family ten miles distant from here, on the road you are traveling. They keep private entertainment, and you can easily reach there for breakfast, and you will get a good one." Although I obtained nothing in this family that promised to be of any avail, nevertheless, I made a note of it, as I intended to do of every family I saw, for otherwise I could not arrive at a profitable generalization.

Next morning I drove ten miles for breakfast. The host and hostess were, respectively, sanguine encephalic, had had seven children, and they, respectively, died at about the age of two years, some of them with hydrocephalous and the others of brain fever,—tuburcular meningitis, I suppose, because I now know that the children of such parents very generally die with the two forms of disease above-named. These parties were not consanguine, nor had they any suspicion of the cause of their

misfortune. The subject now began to appear to me more inscrutable, and my suspicion of the cause being physiological was increasing, which made me more resolved to pursue the inquiry. These were interesting people, and hence, I more than usually enjoyed my breakfast with them. I was soon on the road again. I continued my drive till one o'clock, when I halted for dinner. The host was a strongly marked representative of the *bilious* temperament, and his wife was an equally well-marked representative of the *sanguine, bilious, lymphatic* temperament. They had three sound, healthy, and promising boys, had lost no children. Dinner being dispatched, I was again on the road and drove till dark; but, finding no hotel, I claimed the hospitality of a planter, and it was cheerfully granted. He was a splendid representation of the *sanguine, bilious, lymphatic* temperament, and his wife was an equally fine representation of the *sanguine, bilious, encephalic* temperament, and a lady. I had a very pleasant evening with them. They had had six children, but all were dead; some died of tabes mesenterica, one of phthisis, some of brain fever, and the youngest, an infant, of croup. Between these parties there was no consanguinity, both claimed to be sound and healthy, and so they appeared to be. They seemed confident that no scrofulous form of disease had been in their respective ancestors. They had no suspicion of the cause of their loss.

On the next morning I made a tolerably early start, and drove ten miles for breakfast; and found the host and hostess to be more than usually intellectual and interesting, with, apparently, sound constitutions and good health. They were, respectively, fine illustrations of the *bilious encephalic* temperament, had been married a little more than twenty years, but were still childless; and between them there was no consanguinity. Every thing about this house conspired to fit me for the road,—the day was pleasant and beautiful and the road good; and, hence, almost as soon as I was again on the road I, spontaneously, began to meditate on the observations I had made, and noted the number, and found it to be seven. Indeed, in memory, I re-travelled the road and visited each family; and, by generalizing them, I saw

that the seven families, that is, the parties to them, possessed similarly good constitutions and health, that they lived similarly well, and in a similarly healthy country, and, further, there was no consanguinity between the parties, respectively.

This review shed no light on my difficulty. I now reviewed and generalized their temperaments,—a matter to which, at first, I attached but little importance. I found between the third and fifth parties, respectively, a very considerable dissimilitude of constitution, and that their children, respectively, were healthy, and of viable promise. But between the first, second, fourth, sixth, and seventh parties, respectively, there was a very close similitude of constitution; and, with reference to progeny, they had all been unfortunate.

Indeed, the first, second, fourth, and seventh parties respectively were the same. The parties to the sixth differed nominally a little, but reproductively or vitally they were the same, for, several years before this event, I had concluded that the lymphatic and encephalic temperaments were equivalent in relation to the vital functions. Hence, so far as the generalization of seven cases could warrant an inference, it must be that physiological similitude between the respective sexes of our species renders them incompatible in relation to the procreative functions; but for several years I did not allow this inference to have any other effect on me than that of a suggestion, but more than eighteen years of subsequent observation has confirmed that inference as being the most important truth ever announced in physiological science. This discovery has revealed to me the remote cause of the scrofulous diathesis of the long charged *opprobrium medicorum*. Thus, in two days and a fraction after resolving to make an important discovery in the most occult department of anthropology, I succeeded.

The human temperaments were introduced to the attention of the medical profession more than two thousand years ago, and how it has happened that the fact of the very frequent existence of a physiological incompatibility between the most physiologically sound and healthy parties of the respective sexes, was not discovered many centuries since, is a question which I can-

not solve, without assuming that the profession has not given them that attention they merit, and this I believe to be the fact. For who is, or has been, the physiologist who could authenticate even the simple temperaments, and much less their compounds, by an inspection of denuded crania? If such an one ever lived, I have not become informed of it, and yet this is so possible that every physiological professor should be capable of it.

Since making this discovery, I have consulted every authority I have been able to command, to ascertain whether I had been anticipated; but have not found the most remote intimation that a physiological incompatibility ever obtains between the sexes of any zoological species, with the exception of one recent writer, Dr. T. L. NICHOLS, who, in a small volume entitled *Eroteric Anthropology*, published in New York in '53, between eight and nine years subsequently to the date of my discovery. He announces it to be a fact, that a physiological incompatibility does obtain, occasionally, between the respective sexes of our species, and denominates it "physiological incest." He thus very clearly indicates the character of this incompatibility. He does not, however, indicate the conditions that conspire to produce it, nor the indices of the fact when it does obtain. His statement may therefore be nothing more than the expression of an hypothesis, which appears to be instinctively founded in the popular mind.

But however this may be, before the date of his publication by several years, I had not only discovered the fact, but also the conditions that produce it, and also its indices; and consequently, at the sight of incompatible parties of the respective sexes, whether married or single, I was able to announce the fact, and, in many cases, the consequences, with a scientific certainty.

The existence of a physiological incompatibility between the respective sexes of our species, has, virtually, been conceded to obtain, possibly for centuries, between consanguine parties; but this, I am confident, is either an error or a prejudice. I admit, however, that consanguine parties are occasionally un-

fortunate as progenitors, but the cause is not consanguinity, but that which frequently obtains with other parties. Of the seven marriages I observed in making this discovery, two of them only, as I now know, were physiological; and I think it highly probable that not more than two-sevenths of our marriages, generally, are compatible or physiological; and as the consequences of incompatible marriages are sterility, scrofulously constituted children, imbecile, blind, and deaf children; we have plainly the source of our many sterile marriages, scrofulous forms of disease, asylums for imbecile, blind, and deaf children.

The fundamental fact of sexual incompatibility in our species is, physiological similitude, and it attains in the union by marriage of certain of those conditions which are denominated the human temperaments; consequently, for the purpose of being clearly understood, it becomes indispensable that I should treat, to some extent, of the temperaments.

By temperament, I mean a *sui-generis* mode of human life, compatible with health and longevity. With an essential modification, I adopt the Hippocratic system, which comprises four conditions, and which have been assumed to be elementary, viz.: *the sanguine, the bilious, the lymphatic, and the melancholic.* But having, in common with other physiologists, concluded that the last is a condition that has not and never had a physiological existence, I discarded it. I never doubted, however, that Hippocrates did observe a fourth condition; and observation has forced upon me the conviction, that humanity comprises four conditions; and this conclusion is rendered certain by the fact, that the other three do not constitute a system, and, therefore, do not furnish the elements of the compound conditions which numerously obtain in all communities. The truly fourth temperament I claim to have discovered in 1832; and this so thoroughly perfects the system, that neither myself nor pupils have any difficulty in distinguishing the combinations. I do it readily with denuded crania. I am now entirely confident that the ancients approximated the discovery of this temperament, that their melancholic was a compound of the bilious with the one I discovered, with, probably, a pathological condition of the portal system.

The one I discovered I denominated the Encephalic temperament; and as your readers have not, probably, seen the work entitled, "The Natural History of the Human Temperaments," by the writer, it is proper that I should indicate the principal indices of the encephalic temperament:—Like the lymphatic, physiologists to the contrary notwithstanding, the encephalic has no diagnostic or distinguishing complexion, it may be either fair or dark. In this temperament the cerebrum, in relation to the cerebellum, is large, and, of course, the cerebellum, in the same relation, is small, and, consequently, all the vital functions, except absorption, are feebly and tardily manifested; the thorax and abdomen are small and contracted; the muscles are slender, feeble, and flaccid; the locomotion is dragging; the neck is long and slender; the anterior lobes of the cerebrum are massive, prominent, and superiorly expanded. People of this class are capable of profound thought and motion, but not of powerful, and are greatly liable to monomania.

I think it probable that no amount of observation my readers can command would enable them to see a strongly defined representative of this class, especially, in our country; but they may observe it in combination with the other temperaments, in almost every alternate person they meet in our cities, particularly; and its presence is indicated by an expansion of the superior third of the forehead.

I have reduced this discovery to a highly practical science, which I denominate *the science of physiological marriage*, and it affords the only reliable guide to a physiological marriage, or one that will not be productive of evil consequences to progeny; and, fortunately, it is so simple that any clever Miss of ten summers can, by the aid of a capable instructor, become practical in the application of it in three or four weeks, and without such help, scarcely one per cent. of our most intelligent people could acquire the same ability in the half of a long life. In treating of this science, I have found it useful to divide the four elementary temperaments into two classes, the *vital* and the *non-vital;* the former comprises the sanguine and the bilious, and is so denominated because observation has forced on

me the conviction, that without the agency of one or the other of them, there can be no transmission of life. The latter comprises the lymphatic and the encephalic, and is so denominated because as frequently as I have observed the respective parties to a marriage to be as much as two-thirds of these conditions, so frequently have I learned that three-fourths of their children were dead-born, and the other fourth did not, respectively, live one year.

The vital temperaments I regard as having been founded originally in the constitution of humanity. But the non-vital I hold to have resulted from influences incidental to civilization, thus: it is conceded that wealth resulted from civilization, and wealth induces ease, idleness, and many varieties of indulgence, and these induce debility and lymph in a vital constitution, but more particularly in a humid atmosphere. This condition is not found among savage people, nor among a frontier people; and further, in the preceding thirty-five years, I have observed many sanguine, bilious, and sanguine bilious people to become, in a few years, comparatively, considerably lymphatic, under the influence of ease, idleness, and their associated indulgences; and when this condition becomes induced, no matter to what extent, a lymphatic diathesis becomes entailed, and thus rapidly disseminated.

Mental activity, care, responsibility, and sedentary habits, are about as exclusively incidental to civilization as wealth is, and they, by developing the cerebrum to the neglect of the cerebellum, induce the encephalic condition. This temperament, like the preceding, is not to be found with primitive and frontier people, and when induced it is disseminated by entail. I have frequently observed this condition to be rapidly developed in young men holding responsible situations in banking and commercial houses. It must have been noticed that these non-vital conditions are not exclusively elementary because they are respectively founded on a vital or elementary condition. They are therefore merely adjunctive—induced modifications of vital or elementary conditions.

It must be understood that these adjunctive conditions do not

acquire the consideration of temperaments, until they become so developed as to obliterate the indices of the fundamental condition, except the complexion. It must now be understood why it is that these conditions respectively have not a diagnostic complexion. For if founded on the sanguine condition, the complexion will be fair, but if on the bilious, dark, etc.

It is now seen that there are but two original or primary temperaments, if the preceding views be sound, and so I regard them. Nevertheless, as the non-vital conditions observe the laws of combination, that the others do as they, respectively, exert a specially dynamic influence over the constitution and the mental manifestations, I deem it best to regard and treat them as temperaments. These conditions are of great importance to civilized man,—they greatly increase the varieties of character and useful instrumentalities; but when they become, numerically, greater than the vital conditions, the tendency of the species is toward extinction; and the same is true when the vital conditions acquire a numerical ascendency. Hence, in the present constitution of the species, both classes are indispensable to its prosperity; that is, neither class would alone perpetuate the species.

It is a remakable fact, in the physiology of the pro-creative functions of humanity, that an extreme similitude, and an extreme dissimilitude of constitution between the respective sexes renders them equally incompatible. For both cause the parties to be either sterile or to entail on their progeny a scrofulous diathesis. As extreme dissimilitude cannot obtain between parties who are, respectively, of the same species, but when they are of remote species, as, when one party is of the white, and the other party is of the negro species of our genus, in such alliances, the progeny is, invariably, scrofulous, I believe. It is, therefore, only of the former branch of the fact of which I now propose to treat.

That a considerable dissimilitude of constitution between the respective parties to a marriage is essential to the production of a sound and viable progeny, is a fact that admits of no disputation; and, indeed, an impression of this truth is, instinc-

tively, founded in the human mind, as is shown by the fact, that people contemplating marriage prefer a difference or contrast between themselves, respectively, and the party wanted. This instinct is right, but, before it can be trusted, it must be enlightened. In this relation, I present the following laws:—

FIRSTLY.—*When the respective parties to a marriage are so nearly similar that a qualified observer cannot detect any appreciable difference between them, sterility will be the result.* Illustration.—General Washington and his wife were, respectively, sanguine, and sterility is known to have been the result; and General Jackson and his wife were, respectively, bilious, and and sterility is known to have been the result. The first Napoleon and his first wife though, apparently and nominally, they were dissimilar, and yet, physiologically, they were very similar. His constitution was *sanguine, bilious, encephalo-lymphatic*, and she was *bilious-encephalic;* hence, they were, respectively, compounded of equal moieties of vital and non-vital conditions, and their marriage was sterile.

SECONDLY.—*When the constitutional difference between married parties is slight, but appreciable, progeny may result, but it will be either imbecile, scrofulous, deaf, blind, or unfortunate in some other respect.* The second wife of Napoleon was sanguine encephalo-bilious; hence, in having none of the lymphatic, it differed from his,—her constitution was one-third non-vital, and his was one-half; this difference brought them a son, but the difference was too small to save him from a scrofulous diathesis and a scrofulous death before adult age.

THIRDLY.—The marriage most favorable to a sound and viable progeny, is that in which the parties are, constitutionally, as dissimiliar as it is possible for them to be, within the limits of the species,—that is, one party is exclusively vital and the other is as non-vital as possible, as, when one party is sanguine and the other is lymphatic or encephalic. But as such marriages are greatly impractical in any country, and as a less degree of dissimilitude is productive of a physiological marriage, I found it to be essential that I should find the law that covered all degrees of physiological marriage, that is, all marriages compatible with a sound and viable progeny; and that law is

FOURTHLY.—*One of the parties must be vital, that is, sanguine, bilious, or sanguine-bilious,* (the last, being a compound of the two former, is also viable, and may be substituted for either of them,) *and the other party must be more or less non-vital, and more the better, and less than one-third I cannot advise.* Those who make a viable progeny a condition of marriage must conform to this law, and all infringements of it will be attended with evil consequences. It will now be seen that the marriages of Washington, Jackson, and Napoleon were, respectively, violations of the fourth law.

I will conclude by presenting a few cases of my practice in this relation, out of about three hundred of which I have memoranda, to illustrate the truth of the subject and its practical application.

In 1848, in Oxford, Miss., Mrs. ——— called on me and said: "Prof. POWELL, by my attention to your lectures, my curiosity to have your opinion of my marriage has been excited. This, sir," handing me a little box, "is a daguerreotype of my husband." After directing my attention to it, I responded: I think your marriage has been unfortunate. She rejoined: "how unfortunate?" I answered, you have had no offspring, I think; but if — she interrupted by saying: "you have no need of any buts or ifs, for you have fully answered my question. I have been married more than eighteen years, but am still childless." These parties were respectively *bilious encephalic.*

In 1849, at Raleigh, Tenn., Mr. ———, a planter, called on me and said: "Professor, I heard your lecture last night, and as regards children, I have been rather unfortunate. I have called with a portrait of my wife to obtain your opinion of my prospect of children by her." I responded: as both of you have a sound and healthy appearance, I think your prospect of children is very good, but they will not be such as either you or she will desire. He rejoined, "why not, sir?" I answered, because, they will die of a scrofulous affection of the abdominal glands before attaining the age of six years, respectively. He rejoined: "She has brought me six, but, sir, they are all under the sod, and all died as you have stated, and the cholera

took her off, and I married again, and this miniature is a good likeness of my present wife, now sir, what do you think of my present prospects of viable children?" I responded, it is good, no man has better. He rejoined, by raising his feet, rubbing his hands, and exclaiming "I have three as fine boys as any body ever saw!"

This gentleman and his first wife were, respectively, *sanguine, bilious, lymphatic;* and his second wife was *bilious.*

In October, 1860, Mr. ——— and his wife called on me at my study. He said, "My wife and I have been informed that if you see a married couple you can tell what their luck will be as regards children, is it true, sir?" I responded: it is. He rejoined: "well sir, we have called to get you to tell us, if you please?" I answered: from your apparent ages, respectively, I think you have had your luck, and know more about it than I can tell you. He laughed and said: "you are right, sir, but we desire your opinion of what it has been?" I responded: you appear to be influenced by curiosity. He rejoined: "perhaps we are, sir, to some extent, but you will greatly oblige by giving us your opinion?" I responded: your luck has been of the worst possible character, for if your wife has had children, of which I am doubtful, three-fourths of them were dead-born and the others did not, respectively, live one year. I now addressed the wife: have you had children, madame? She answered: "yes, sir, eleven, and nine of them were dead-born, and the others lived only a few months.

I now addressed the husband: were not you and your wife sent here to try me? After a pause of hesitation, he answered: "yes, sir; two doctors, who have known us for many years to be sound and healthy, thought you could not tell what our luck had been, persuaded us to come and try you; I hope you will not blame us, for we meant no harm." I rejoined: as I have granted the favor you asked for, I desire you to do me a favor. He rejoined: "well, sir, what is it?" I answered: I wish you to say to those doctors, that I say they have not minds enough for doctors, but enough for chicken-thieves, and that for it they are mean enough. He answered: "I will do it, sir; for they ought not to have sent us here."

These parties were, respectively, *bilious encephalo-lymphatic.* He was more encephalic than she, and she more lymphatic than he; and, but for this difference, sterility would, probably, have been the result of their marriage.

In September, 1861, Mrs. ———, of Indiana, called on me said: "Prof. POWELL, I have been, as I suppose, reliably informed that if you see a married couple, or their portraits, you can tell whether they are compatible or not; have I been correctly informed, sir?" I responded: you have madame. She rejoined: "when I obtained this information it interested me so much that I consulted several of my city physicians about it. They said, that they had heard of your pretensions and thought it to be an impossibility, and that you must be an extravagant humbug; but such was the source of my information that I did not yield to their opinions; and, as I had business up here, I resolved to bring my husband's daguerreotype and ascertain how the fact might be for myself. Here it is, sir. Now, if you please, your opinion of our marriage?" I responded: your marriage, I think, has been unfortunate, for if you have had children,—which is possible but scarcely probable,—they were either imbecile, died in early infancy of dropsy of the brain, or of a scrofulous variety of brain fever. She rejoined: "now, sir, I have the satisfaction of knowing that your pretension is not only possible but demonstrable. I am not, however, surprised that my physicians should have thought your pretensions impossible, but I am surprised that they should have so confidently expressed an opinion about a subject of which they certainly knew nothing." She resumed: "I have three children, sir, my first is still living, but my physician and neighbors say, that he is an idiot, but you say imbecile, pray, sir, what is the difference?" I explained. She rejoined: "then, sir, he is not an idiot, but an imbecile, my second died in the cradle of water on the brain, and my third, at about the same age, died of brain fever, but of what variety I never learned." She continued: "have I nothing to hope from my marriage better than I have had?" I answered: nothing except, probably, sterility. She added: "you have, beyond any doubt, made a discovery

that will bless the world, and I rejoice to find you are more than equal to my most sanguine expectations."

These parties were respectively *bilious encephalic.* He was more encephalic than she, and she was more bilious than he; because of this difference children resulted. But believing that her maternally blighted hopes had increased, and was increasing, her encephalic condition, I thought it probable that sterility would result for her future.

In Oct., 1861, H——, Esq., called on me, from one of the lower counties of Kentucky, and said: "Professor POWELL, I have learned that if you see a married couple, or their portraits, you can tell whether they are fit for progenitors or not; is it true, sir?" I responded, it is. He rejoined: "It has always appeared to me to be reasonable, to suppose that human nature possessed the elements of the science of its most important function; the reproductive. Yet, as the literature of the day has not even furnished an intimation that such had been imagined as possible, and much less as having been discovered and developed into full blown reality, and hence I was sceptical about it, when informed of your pretension, and therefore I consulted several physicians about it, and with one exception your pretension was pronounced an impossibility, and you a humbug. But one of them said he 'had not heard of your pretension, but if you made such a pretension, he was inclined to believe you capable of the reality; that about twenty years ago, when you were a professor in the Medical College in New Orleans, he heard you lecture, and that you were then regarded as one of the most bold and original thinkers of the age. Sure I am, there is no humbug about him.' This, sir, encouraged me, and as I had business up here, I resolved to bring my wife's daguerreotype with me, and put you to the test of your pretension, provided you subject yourself to such tests." I rejoined: I do, sir, and am pleased to have them, because they furnish me new facts. He handed to me the daguerreotype with the interrogatory: "Are we fit for progenitors?" I responded: as you and she have a physiologically sound and healthy appearance, it is my opinion that in the abstract you are favorably

constituted for progenitors, but in relation to each other, you are not. He rejoined, "what is the difficulty?" I answered, it is that your children will die of tabes mesenterica before attaining, respectively, the age of six years. He resumed: "You have got the prince of all the sciences; you have demonstrated the truth of all I have heard of you. A more sound and healthy couple than my wife and myself now are, and always have been, do not probably live, and yet, of the six children my wife has brought me, four have died as you have said they would, the fifth is going the same way, and the sixth is an infant and now appears promising. Must we lose it, too?" I answered, I think you will.

He continued: "My physicians insist that scrofula must have obtained in the ancestry of myself or my wife, but I am very confident that such was not the fact. What do you think of it, sir?" I responded: I know nothing of the ancestors of either you or your wife, and therefore have no opinion in relation to them. My conclusions in relation to your children were founded exclusively on my conception of the constitutions of you and your wife, respectively, and it was to the incompatibility between them that I attributed the scrofulous loss of your children, consequently I can conceive of no necessity for supposing scrofula to have obtained in the ancestry of either of you, but it may have, and therefore your physicians may be correct, for I know nothing about it, nor can I conceive of any necessity for the supposition. He resumed: "Would not this marriage incompatibility be a sufficient plea to either party for a divorce?" I answered: As it defeats the object of the marriage institution, it ought to be, and ultimately it will, I doubt not, but not now, I think. He rejoined, "but why not now?" I answered, because it is not known to our courts, physicians, or people. He continued: "Suppose I had brought you my wife's daguerreotype before we married; could you have informd me what would happen as you have what has happened?" I answered, the same, sir. He rejoined: "This subject is so important to the people that they will not long tolerate their physicians in an ignorance of it, consequently they will have to bestir themselves."

By the aid of this contribution, any physician who has but a very imperfect acquaintance with the temperaments can, in the circle of his own practice, in less than a day, satisfy himself of the truth of this discovery; because incompatible marriages and their consequences abundantly obtain in every town and city in our country. Physicians are now everywhere heard to say, that the children of some people cannot be cured when they become sick. Whose children are these? I answer: they are those of incompatible parents, for, invariably, if they escape imbecility, deafness, or blindness they have depraved constitutions.

The preceding parties were, respectively, *sanguine*, *bilious*, *lymphatic*, and very similar to the first parties in the second case,—and so were the results,—thus showing that the physiological, like the other natural laws, are uniform in their results.

I promptly respond to all questions, honestly propounded, in this relation. My observations in this relation for more than eighteen years have forced upon me the conviction that, physiologically, incompatible marriage is the remote cause of the scrofulous diathesis.

ARTICLE XIV.

COLD AND WET A CAUSE OF CAMP DISEASE, AND ITS MODUS OPERANDI.

By C. A. HUNT, M.D., Surgeon of 126th Reg't Ill. Vol.

My sanitary report of March, having been suggested by the Medical Director for the consideration of the Society, and myself being appointed the essayist, I take the occasion to make the report conform to the nature of an essay, with more extended remarks in relation thereto.

Just at this period of the season, following a cold and protracted rain, I noted the following effects of it upon my own regiment, while stationed near Jackson, Tenn. There were about twenty-five taken off duty with the following peculiarity,

in nine companies remaining in this one camp:—About ten had cold and cough, or catarrh; six took *pneumonia biliosa;* two *pneumonia typhoides;* two bronchitis with aphonia; one an intermittent, and about five with diarrhœa. In the one company stationed four miles south of Jackson, on the railroad, had nine taken sick at the same time, in which one case assumed the form of a remittent type of fever, and eight that of dysenteric flux. In this connection I draw the attention to these various cases, all arising from one cause, for two purposes; one, to show how single may be the exciting cause, and how great the variety of results under precisely the same circumstances, and, secondly, to impress the fact, that cold and wet are causes sufficiently forcible in action upon the body to induce nearly all the common diseases of camp life. I do not say that it does do it, especially during warm weather, but only speak of its efficiency during the seasons of their prevalence in combination, and upon that basis will show by what means, and through what channels, the various results are brought about.

I now propose to call attention to that part of my subject; not designing to argue the special production of any one disease, or class of diseases, but to set forth the general tendencies and common results, as applicable to any disease, which can result from sudden abstraction of heat followed by intropulsed fluids, and wish incidentally to say, that the subject has been neglected by the profession, who have been satisfied with *phenomena* alone, without being arrested by the very great importance of estimating the causation, and the paramount necessity of guarding against these agencies so common around us.

The phraseology of *taking cold* is familiar to all of us, and is even the expressive term used by literary men, derived from the common notion that they have imbibed *cold* which has found a location in the body, as it existed out of it, and like the kindred phrase of drawing out fire after a burn, has passed down into a fire side axiom.

The question, in its philosophic sense, comes up, how do we take cold? We evidently do not contract it from water, or dampness, or from the air, or from the earth, because all these

elements, or partitions, of the habitable globe, are populated with birds, fishes, animals, and insects, constructed as we are, of the same constituents, of the same organic relations, and breathe the same air, drink the same water, and live upon the same food, and pass through the same process to dissolution, and yet they are not effected by it. There is nothing in air or water which, in themselves, are poisonous, or causative of disease. The whole explanation lies in the sudden abstraction of heat from the body, to the extent that *the organic forces of the economy become a deranged relation to the matter of which the body is composed.* This is effected in two ways: First, by conduction, and second, by evaporation. The process of conduction of the heat is carried on by the contiguity of damp clothing, together with the contact of air charged with floating vapor. The clothing, which when dry is porous and a poor conductor of heat, but when wet, has its porous interstices filled with watery particles, to the extent that a complete surface and uninterrupted sheet of conducting material is thus presented to carry off the heat of the body, and superadded to this silent, continuous contact, there are globules of air constantly picking up and bearing off the particles of vapor which have become warmed by the body, and substitute such as are cold. But when evaporation supercedes conduction, or both operate together, as is common, then the cooling process is still more rapid. For each globule of air feels itself especially commissioned to fill its little canteen with its 1,000° of heat, and on its pinions seek the moving gale, or the lungs of some adjacent plant or tree. In this way the air becomes very officious, at the same time, in reducing the heat of the body; for while each air particle is expanded and moving off with its caloric balloon, freighted with the warm vapor, into greater altitudes, the cold air is rushing in to fill the place, and again flies off by the expansive levity which it borrowed from the body itself.

Those medical men who have had occasion to use cold lotions to inflamed parts can comprehend, to some extent, what would be the result should they apply that same lotion to the entire body at the same time, for such is the effect of wet and cold,

after a cold rain, or cold following rain. What is the result of its sudden application? It causes a sudden intropulsion of the fluids of the exterior in upon the interior organs, which of course become not only overcharged with recrementitious matter, but also of a remora of blood, which was due to the capillary surface. To compensate for this *physiological result*, (for it is yet physiological,) the interior organs are forced into a vicarious action, in order, in some way to equallize the effect and pressure. This physiological action, however, I do not array here as being any part of diseased action, but it is a normal process so excessive in extent that disease often results, not from the influx of the recrementitious matter, but from the remora of blood producing overdistension of some local capillary network. The intropulsion of the recrementitious secretion of the dermoid tissue must become of very feeble importance in the chain of abnormal phenomena, for the reason, that the secretion itself is not vitiated when it retreats from the surface, and cannot become so after the blood retreats, for the secretion is suspended until the blood returns.

If it be meant that the effete atoms of the worn out tissues are thus productive of disease, when thus suddenly driven in from the surface, I would say that the position is equally fallacious, for the same reason that the process of repletion and waste is also suspended, and there is no excess. And the idea that the changed relation of the fluids of the body from one part to another, as a cause, is of itself untenable, because the organism is in constant process of such changes, in winter and summer. That process is experienced by the diver into cold water; by the æronaut in the suddenly rarified air, also by persons descending into wells and ice-houses, during summer, etc. These physiological actions must not be looked upon as causative, but only as a normal process by which, and through which, and after which, disease does often occur.

To illustrate that point, I will introduce an engine with two boilers, with steam enough on to run a given weight in a mill or train. I connect the boilers so that they communicate with each other. I am under way, in full motion. I now bring sud-

denly in contact with one boiler cold enough to bring about sudden condensation of the steam back into water. The sequence of that abnormal act is this: when the condensation occurs, and a vacuum is formed, the steam forces the water from the other boiler into it until by oscillation the equilibrium is restored. But the engine stops. Why? Not because of the change of the fluids from one boiler to the other; not because of an influx or remora of fluid into the first boiler, but because of the changed relation of the *heat* to the *matter*, *water*, which propelled the engine. What was lost in this process? Not *water*, but *heat*. The *heat*, then, we observe, is the moving power, and not the water, the latter being only the recepticle, or agency, in effecting motion to other matter. Now it must not be lost sight of, that this same heat is the moving power in the animal economy, as well as everywhere in the known universe. I will state a basis of all pathological, as well as physiological action, upon which rests all the causative agency of all diseases, and it applies to all circumstances; it is this: No *diseased action can begin or exist*, except by first a *deranged relation* of the *organic forces* to the *matter of the body*, or a *changed relation of the matter of the body to the forces*. When I speak of forces, as applied to animal or vegetable, I mean heat and light, and their transitions into electricity and magnetism, and when I speak of matter, I mean the material structure of the body, whether gas, fluid, or solids. It is the heat power which effects motion, and the light, identity of place and function. I will explain this point. If any circumstances shall change the heat and light which would be required to perfect the growth of a tree, the tree would decline and die. If, on the other hand, we girdle the tree, so that the fluids are changed in their relation to the forces, light and heat, the tree also dies. Hence, it seems to me plain, that in order to have integrity of life and health of this tree, there must be the proper integrity of both the forces, and the matter. If either fails to be perfect, disease must occur, and probably death. Precisely this condition, and these circumstances, presents themselves in the vegeto-animal economy, except that both are required in greater abundance, because

of greater waste. The importance of the production of these two forces may be better estimated, when it is considered that all motion of mind and body is due to one, while the replenishment is due to the other; the matter being furnished. Now when this heat of the surface was suddenly consumed, as it was in the one boiler, it became necessary to have it as suddenly restored, if possible, in order to prevent a cessation of function. Hence the heart immediately puts on the construction train, and the new material, containing a large supply of oxygen, is blindly yet vigorously furnished to the exterior, to supply the defect as soon as possible, and when the entire surface is reached, there appears an excessive action. Suddenly, instead of the pallid surface and blanched countenance, and small pulse, and dry, cold skin, and general suspension of dermoid secretion, we now have a *hot skin, tumid face, high pulse, hurried and suffused countenance*, the capillaries now over-distended with blood, the secretery cells overpowered with excess of the same, which still suspends secretion. This *is a condition* which has got the name of *Fever*. I will not stop here now, to treat that topic, however.

The assimilative functions, which hold their laboratory in the extreme capillaries, also suffer diminution in the same degree. Here are atoms of matter, all through the tissue, which have become effete, but not yet cast off to give place to the new matter; but, on the contrary, are yet in the cell-wall and subject to the action of oxygen, which *partially* acts upon them. Although the abnormal relations now existing between the oxygen, the blood capillaries, and absorbents will not resume function yet so much as to consume these atoms, so that they can be dissolved into fluid and be carried away; but they are oxygenated, and, while under this process, are giving out excess of heat, not to be expended in normal motions, or not to be taken up by the excretion of the skin, for it is checked, or not to be consumed by the dissolving atoms into water, for they do not dissolve; but to be spent upon *remote parts* as well as *adjacent parts*, and out of it may appear arterial excitement, wild mental action, muscular excesses, spasms, diarrhœa, cough,

delirium, &c., &c., all of which are results of excessive action, evinced in the inordinate expenditure of heat; for, it must be observed, that the heat generated must be expended and compromised somewhere in the economy, and any abnormal or excessive action or motion is the evidence of excessive heat, whose expenditure has devolved upon that part for want of ready equalization. Could the worn-out atoms be liquified as fast as burned, or partly burned, the function of repletion would not be checked, and the process of food-taking in disease would not be checked by first checking the appetite; nor could there be any abnormal action when the office of waste and repletion is in balance.

The disturbance in this balance is the derangement of the matter of the body to the forces; for, when atoms of tissue are not broken down, and elimination, of course, there can be no place for new matter, and no demand. Now, this process of overheating is a reaction upon the previous abstraction of heat. This is a general process; and the true phenomena, though not always in the same degree, is as plain as the phenomena of the two boilers.

Every disturbance in the motion of either solids or fluids is caused by a disturbance in the heat force, and a derangement of the force in relation to the fluid or solid. What is the whole process of changing atoms, either in act of deposit or waste, in secretion or excretion, in production or re-production, but the new relations of matter, which, if presented to the forces always the same, must be attended with the same results, provided the forces are normal also. The process of oxygenation of the effete tissues must be either partial or complete, if acted upon at all, and in this process lies the most important to health of any physiological act in the economy. We observe, and it has escaped no physician, that the effete atoms are not removed, except in a slow process, during disease; and, in our lingering constitutional diseases, such as, for instance, typhoid fever, the oxygenation is, at first, more active and the heat higher, yet the tissues *do not change place*, and there is no call for repletion. After a time, the oxygenation becomes more difficult,—the

fever and heat declines,—still there is no change; and not until the crisis is formed, and the cell-walls give up their dead, and the old atoms begin to pass off, do we see the cheeks sink in, and emaciation become general, that the appetite arouses and repletion commences. This process of waste and repletion is the controlling function of the organism, and becomes, or is likely to be, effected by the action of cold, or by any other means by which the *forces* and the *matter* become deranged. I will not dwell longer on this most interesting topic, all of which has an especial bearing on disease.

This effect is the process, occurring wherever fever exists, or any other constitutional affection, which so generally involves the many functions of the body; and, I wish here to be understood, that the general fever does not cause this general assimilitive disturbance, but that fever is the result of it, and is *symptomatic of it.* Fever has no individuality, no more than *any other disease;* but they all result from a chain of deranged phenomena, in which the process of waste and repletion are paramount in the line of causation. Now, upon this intropulsion from sudden cold, the common laws of natural order prevails, that of *contraction* where *heat is not*, and *expansion where it is;* hence the first contractile impress is made right where colorification begins upon the surface. We now have the intropulsive; and remora takes place in capillaries of some internal organ,—say the lungs,—but, upon reaction, this remora ceases before permanent hyperemia occurs, except, probably, in a circumscribed patch of tissue in which inflammation or congestion and, finally, suppuration occurs.

Now, I ask, why did not healthy action proceed after this first engorgement, or after the hyperemia became permanent? There was no trouble now in the heat and light, for the heat has become really in excess, and just as ready to act legitimately through that spot as any other. It is this. The matter there has now become deranged, as relates to the forces. First, the forces were deranged, and now a succession of phenomena has arisen, by which the matter is deranged to the forces, and death of the part, or *local death*, has occurred.

While the effete atoms are in process of combustion and heat is being generated, the skin would soon lower the heat were its functions not arrested by the same act. More than that, the liquifying the solids is also a cooling process, for no solid can become fluid without the absorption of much heat, and in this process much of the excess of heat would be equalized, were it not for the fact, that these atoms are not thus liberated from the cell-wall or liquified. That process too is arrested; and the vicarious act of disposing of the forces is greater than that of disposing of the deranged secretion or supposed peccant humors.

As to the production of disease, it matters not whether the heat of the body is suddenly abstracted in one part, and the elements of the body inordinately taxed to reproduce it, or whether, by the reaction, occasioned by the supply of heat, has so deranged the cell function that the effete solids can be oxygenated and not liquified. In both cases, the derangement of the organic forces,—*light and heat*,— are disturbed, in relation to the matter, the same as the heat to the water in the engine. On the contrary, should I choke up one boiler with foreign matter, or contract the boiler to half size, then the engine would also stop, for I would change the relation of the matter to the force. In either case, the condition of those relations will be manifest all the way through, until the identity of the organism shall be destroyed. This brings me back to the text, that the sudden abstraction of heat by *cold and wet*, (which is the same in effect,) produces disease, either by deranging the forces to the matter or the matter the forces; and that the mere change of the fluids is not the *cause of disease*, but one process in the chain of results. Why does this process of concentrated action so often develope disease in the mucous membrane and parenchyma of the lungs? The principle reason exists in the yielding character of those tissues which have not elasticity enough to regain their lost condition from the remora. In this stage of remora the vessels become charged with blood, and eight-tenths will, upon reaction, resume their pristine level; while one-fifth will remain with distended vessels, some parts of which may run into inflammation, and others into congestion.

I would here beg leave to say, that although pus forms during a low inflammatory process, it is equally certain that the same vessel in which it forms becomes congested, or relaxed, and over-distended before the exudation period. This is the changed relation of matter to the forces. Again, the mucous membrane is more obnoxious to this intropulsion, because it is slowest in throwing off excessive influx of extraneous fluids, and slowest in its secretion and excretion. It is the most yielding tissue in the body to vascular pressure. So yielding is this tissue to distension, that I doubt if true inflammation ever is developed in it, unless the adjacent tissues are equally implicated. Congestion, following remora, is, undoubtedly, the pathological condition of the diseases which are developed in it. These two are the accumulated evidences of changed matter, in relation to the forces.

I do not mean to assert that the changed relation of forces all proceed from sudden extraction of cold. On the contrary, the act of taking cold or catarrh is often produced in dry, warm weather, and while in the house. This is owing to the electrical or magnetic condition of the air, which controls the *organic forces* of the animal system. Instances of this meterological influence upon the organic forces is shown in all the animal world, not only during disease but in health. In a word, the *forces* of the economy are directly in relation to the process of *combustion within the body*, and the forces and vicissitudes of all nature without the body; while the matter of the economy is in direct relation to the food consumed and the process of æration.

The abstraction of *heat* then, to the extent of organic derangement, first involves the *forces* by which the circulation is deranged; succeeding to this, consecutively appears in some locality, a disease in the solids, in which appears deranged matter. This diseased spot then being beyond the reparative process of repletion and waste, fails to develope the phenomena of life any longer, and must drop into other relations common to decay.

Army Correspondence.

FLOATING HOSPITAL, "NASHVILLE,"
April 27th, 1863.

DR. DAVIS,

DEAR SIR:—A long time has elapsed since my last writing; and during that time I have only had the opportunity to see the wounded of one battle,—namely, Corinth,—where I remained but seven days before I fell sick myself, and, in consequence thereof, did not write. That being now so long past, and especially as you, probably, had accounts from that field, I will not attempt to say anything about it, but give you the histories of one or two cases on the flag-boat "Nashville," where I am staying at present.

CASE I.—C. S., soldier, American, aged 25, was admitted to hospital, April 15th, as convalescent from diarrhœa: Tongue was clean; bowels regular; body emaciated; and the pulse regular, but weak. He had quinia et. ferri. citras., in small doses, simply as a desirable tonic to aid in building up his strength, and to eradicate any remains of malarious poison which might be lurking in his system. In the meantime he had permission to take exercise both on board and on shore. This course was pursued with apparent benefit until noon of the 17th. During the forenoon he had been quite active and cheerful; and when the dinner-bell rung, he remarked, that he would go and take his place at the first table. He started, and arrived at the head of the stairs, when he fell upon the floor. Word was brought me immediately, but when I reached him he was quite dead. At the autopsy, four hours after death, the rigor mortis was well-marked, the body not *extremely* emaciated, and suggillation, in dependent parts of the body, very distinct. The brain and spinal cord were exposed by the usual incisions, with no noteworthy circumstance attending, except, perhaps, that, upon division of the vertebral veins, fluid blood, to the amount of two quarts, was poured out. There was fluid contained within the

membranes of the cord to the amount of, probably, f℥iv. The dura mater was, abnormally, adherent to the skull at the base of the brain, and contained about f℥ii. of effused fluid. The base of the brain was thought to be slightly softened, but, in the absence of the microscope, it could not be with absolute certainty decided. The membranes and substances of both brain and cord were considerably congested, but the nervous matter of the cord appeared to have suffered no structural lesion. The lungs were healthy. Within the pericardium was found f℥iv. or v. of serum. The muscular tissue of the heart was somewhat softened, and traces of congestion were observed. Stomach was simply congested,—liver healthy. The bowels, with the exception of the duodenum, showed evidence of nothing more than congestion of a passive character. The duodenum had, evidently, been the seat of both inflammation and ulceration; and, in several circular patches, the mucous and muscular coats were destroyed, leaving but the peritoneum. Perforation, however, had not occurred; and the ulcers seemed in process of cicatrization. The kidneys were much congested, but quite firm. This congestion appeared to have been quite recent, and to approach more nearly to an active arterial congestion than anything discovered elsewhere.

CASE II.—E. D., Frenchman, aged 25, had been admitted to hospital, April 17th, with chronic diarrhœa. He became convalescent under the use of the usual remedies; and upon the 27th was permitted to go on shore for exercise. He, however, took advantage of the opportunity to go to the sutler's store and obtain some nuts, Bologna sausages, &c., and also to strip off and bathe in the water of an adjacent bayou. During the afternoon of the 28th he was attacked suddenly with spasms, together with complete abolition of consciousness; dilated pupils; feeble and frequent pulse; and slightly stertorous breathing. Chloroform was administered with apparent benefit, and, upon the return of consciousness, also some carbonate of ammonia. He soon relapsed into another paroxysm, which was followed by a third, in which he died. Four hours after death, the body was examined. It was much emaciated,—the rigor

mortis well-marked, and but little suggillation. Upon removal of the calvarium, several spots of effused lymph were discovered between the dura mater and parietal bones, together with considerable congestion of its surface. Beneath the dura mater was found two ounces of serous fluid. The brain, however, appeared to be only passively congested. The ventricles,—particularly the fourth,—were filled up with serum. The brain was unusually firm. The heart was found empty. Lungs, liver, stomach, and bowels all,—with the exception of some congestion,—healthy.

Cases of a similar character to the above have repeatedly occurred here, commencing as early as the 1st of March. As I have noticed but little intermittent here, yet I am not of the opinion that they are the result directly of miasmatic influence, though they bear, apparently, some relation to the pernicious intermittent of this latitude. The patients almost universally present marked emaciation, with great tendency to œdema and anascarca; but, aside from the debility thus indicated, very frequently do not present marked symptoms of disease. One case was of a nurse who had not been taking medicine, and had been on duty regularly. In the evening, saying, he felt unwell, he went to his bed and lay down; and, at the end of four hours, when his watch came on, he was found quite dead, and had evidently been so from one to two hours. From some cause the blood is excessively impoverished and the tissues of the body very imperfectly nourished; and, as is universally the case with debilitated subjects, congestions are very liable to occur, and to result in rapid and copious effusions.

If this is the true pathology of these cases, the important and interesting question becomes necessary: what is the cause at work which produces such a debilitated condition? It is not, certainly, in every instance disease,—in the more common acceptation of the term,—for men become so debilitated and even die off thus suddenly. Who will say, they have not "been sick, but have only run down weak?" In the solution of the question, one would, naturally, first turn to the food furnished the patients. Doing so, we find the rations ample in quantity,

and of a quality sufficiently nutritious to sustain a man in vigorous health. Late physiologists, however, assert, that food, to be readily digested, should be palatable, and that the rations, *unless properly cooked*, are not.

Few of the soldiers are good cooks, and a less number still deem good cookery of sufficient importance to give it the attention which it deserves. Even the officers do not seem to understand or appreciate the fact, that food, before it is eaten, should be cooked. Cases have occurred upon this river, in which a whole regiment has been cooped up on a boat for as long a period as thirty days; and with no other chance for cooking than the boiler furnaces. Of course, the mass of the men were compelled to eat their food uncooked; and, even when the boat lies tied to the shore, still, for fear the men will get scattered, they are retained on the boat. This has been done, if not with the consent of the medical officer, at least, *not* contrary to his vigorous remonstrance; and thus the soldiers suffer a wrong, without the shadow of a chance for redress.

Probably, another great cause of the debility of these patients is, the utter listless inactivity of camp life. Troops should be compelled to take a certain amount of exercise every day; for, where this is not done, numbers will rise only upon the call to meals. Artillerists and cavalry, who have their horses to take care of, are admitted to be more healthy than infantry. Fatigue squads, who work from day to day, have only a small proportion of sick, in comparison with common soldiery.

These evils of cookery, diet, and exercise, probably, cannot be remedied in the time which our volunteer force is likely to remain in the field. Still, a proper appreciation, upon the part even of the officers, of the causes of disease, would save many a life which is now uselessly wasted. I hope and believe that the time is coming when military officers will learn that to disregard the advice of their surgeons will not promote the efficiency of their commands; and when the medical officers, feeling their responsibility for the lives and health of their men, will not hesitate to use every means in their power to promote their welfare. Yours truly, O. B. ORMSBY,

Assistant-Surgeon, 18th Regt. Ill. Vols.

ION PLANTATION, LA.,
HEAD-QUARTERS 69TH INDIANA VOL. INFANTRY,
April 13th, 1863.

EDITOR OF MEDICAL EXAMINER,

DEAR SIR:—The following case may be of interest to you and your readers:—

Mr. S., Co. G., a teamster, on the 10th of April, whilst removing a wagon-hammer, received a blow from it upon the left super ciliary ridge, inflicting an incised contused wound about one inch in length. He was knocked down by the blow, but, by the time I reached him, was sitting up, and complained a little of his head aching; but, as it was nearly night, thought that by sleeping he would be all right in the morning. In the morning, he went to work as usual, and made no farther complaint until the evening of the 13th, when he came to me and desired me to dress the wound with adhesive-plaster, as he found the water dressing rather inconvenient. In conversing with him, I found that he had a slight headache most of the time, but nothing serious, and, further, that he could not see so as to distinguish one object from another; but there was nothing in the appearance of the eye to indicate anything remarkable, except that it was considerably ecchymosed.

On the evening of the 14th, whilst carrying a bucket of water, he fell and expired after drawing only one or two breaths.

Autopsy.—April 15th, fifteen hours after death:—The posterior part of the scalp was well-filled with blood, but the tissues were not contused. On opening the cranium, the cerebellum seemed in a healthy condition, with no inflammatory indications at any point. On opening the ventricles, a small clot, about the size of a crow's quill, was found in each ventricle. On raising the tentorium cerebelli, I found the cavity beneath very full of liquid blood; and, on removing the cerebellum, a small fissure was found in the right bassilar vein, about half a-line in length; and also the internal and posterior portion of petrous part of the temporal bone fractured about one inch in length. In haste, I am yours truly, W. B. WITT,

1st Assistant and Acting-Surgeon, 69th Ind. Vol. Infantry.

The Clinique.

IMPROVED METHODS OF TREATMENT IN JOINT DISEASES.

By E. ANDREWS, M.D., Professor of Surgery.

GENTLEMEN:—Within the past three years, the improvements in the treatment of joint diseases have outstripped surgical literature, and have produced valuable practical ideas, which as yet are not to be found in our standard text-books. As I desire to keep you informed in all valuable improvements, I have concluded to call your attention to this topic in particular, this morning.

I present you here three patients. One has a hip-disease; one a disease of the knee-joint; and one a curvature of the spine; three diseases which have been the torment and stumbling-block of surgeons through all time, but which are now about to contribute to their honor and renown.

This case of hip-disease does not differ from others which I have often placed before you, except in being in an older patient. In most instances, it is confined to the age of childhood, but in this instance it commenced at the age of sixteen, and has continued till twenty-two. An English surgeon states, that such late cases do not proceed to suppuration and caries; but this one is both suppurating and carious, and will require excision of the head of the femur. To-day, however, I simply wish you to observe the disease of the hip, for the purpose of fixing in your memory the perfect analogy between hip-disease and knee-disease. Chronic inflammation of the knee-joint, unlike that of the hip, occurs, without distinction, at all ages; but, in its causes, course, and treatment, it follows the same laws. A few months ago this knee began to be tender and lame, apparently, in consequence of a slight injury received in the vicinity. From that time to this it has gradually grown worse. At present it displays the following appearances:—The outline of the

knee is a little enlarged and not perfectly natural in shape, indicating that the cartilages and bones are hypertrophied. It is not anchylosed, but the motions are much restricted, and the patient habitually carries it in a bent position. This position is characteristic, and is based on instinct. For to maintain the extended position, the vast strength of the *quadriceps femoris* muscle is brought to bear, and, at the same time, the extension tightens the flexors. All this causes an increase of pressure of the inflamed surfaces of the joint upon each other, and a consequent aggravation of the pain. Hence, the patient, instinctively, bends the knee to such a point as he finds, by experience, gives the least amount of suffering.

The external appearances of these cases differ greatly. Some present us with knees in which you can detect scracely the slightest alteration of the shape, while others show great swelling, anchylosis, and atrophy of the muscles of the thigh. A greater or less degree of lameness always exists.

The disease preserves a perfect anology to hip-disease, in its causes, course, and results. It takes its origin in an aplastic diathesis, acted upon by any mechanical irritation. Thus, it may arise, in such a diathesis, from a blow on the knee, from a wrench or strain, from a fracture in the vicinity, or from over-exercise in running, jumping, or even walking. Like hip-disease also, it does not attack rheumatic constitutions; nor have I ever known rheumatism of the knee to degenerate into this disease. The two seem to be opposed to each other, although, they bear so close a resemblence that, in early stages, I have repeatedly seen this disease mistaken and treated for rheumatism.

It is convenient to divide the course of this disease into two stages.

The first is the stage of inflammation merely, and the second is the stage of caries and suppuration.

In the first stage, we have pain in walking, flexion of the knee, and, generally, some deformity. As the case progresses, it shows, by its appearance, whether it merely affects the synovial membrane, or involves also the cartilages and bones. In

the first case, there will be very little deformity, but only pain and tenderness. In the other case, (where the cartilages and bones suffer,) the form of the joint becomes notably changed, and its diameter enlarged. Some cases recover spontaneously from this stage, but others proceed to the effusion of plastic lymph and fibrous anchylosis of the joint. At this point, some additional recoveries occur with loss of motion. A large number, however, unfortunately proceed to the second stage of the disease,—that of suppuration and caries. The capsule of the joint bursts, and the pus gushes out and continues to flow until the patient dies of exhaustion, or, in a few instances, recovers by the slow extrusion of all the carious spiculæ of bone. Such is the course of the common knee-joint disease, which you see is, in all main points, identical in nature and results with hip-disease.

There is one point of considerable interest in the pathology of these cases, which I will mention, because, it directly suggests the proper treatment, and that is the following:—The disease, in the outset, is usually limited to one surface of the joint, and only involves the other by the mechanical pressure and friction which its roughened surface produces. I hold in my hand the bones of a knee-joint which I exsected some time since in this disease. Now, observe that the femur would seem to have been the starting-point of the disease, and to have then implicated the bones articulating to it. On the lower surface of the inner condyle of the femur you observe a sequestrum about the size of a dime, lying loosely in its bed, but which could not leave its location and be cast off, because it was capped in and held by the concavity of the tibia on which it rested. Such being the case, the following results were inevitable:—The cartilage upon the face of the sequestrum would rapidly disentegrate and disappear, and the rough naked piece of bone bathed in pus, lifted by the granulations in its bed, would press directly upon the articular surface of the tibia. By continuing this pressure, it would rapidly cause a corresponding ulceration and disintegration of the tibial cartilages; and, when that was removed, a denuding and necrosis of a corresponding spot of the bony articular face of the tibia.

Now, look at these two bones more attentively, and you will observe, that, directly at the point where the sequestrum of the femur pressed, there is a sequestrum in the tibia, so accurately fitted, both in size and location, that the one must have rested exactly upon the other. On the anterior portion of the femoral articular face is another sequestrum, and exactly fitted upon it is another in the posterior surface of the patella. These significant points show that the disease extends from one bone to another, by the simple effect of mechanical pressure and friction of the roughened surfaces against each other; and they prove, therefore, the importance of devising apparatus to take off that pressure and prevent that friction.

The treatment of knee-joint disease is, as already intimated, identical with that of hip-disease, and mainly mechanical. I have often called your attention to the fact, that the reason why inflammations of the hip-joint do not so often recover spontaneously, like those of the shoulder, is, because the inflamed head of the femur is ground upon harshly by the weight of the body in walking. The same principle is *a fortiori* true in the knee-joint. Hence, in the treatment, the first and foremost object is to apply some apparatus which shall effectually take off the weight of the body and the tension of the muscles from the joint. Moved by these reasonings, I have been in the habit of treating the disease in question by the same splint which I use for hip-disease, and with excellent success. I was not aware that any one else had tried the same experiment until a few days since, when I learned that Dr. DAVIS, of New York, the worthy discoverer of the splint treatment for hip-disease, had also, before myself applied similar apparatus to the knee, and with even greater brilliancy of success than in the hip. I consider it thoroughly settled, therefore, that the mechanical treatment is as applicable to the knee as to the hip; and that in both the early application of a suitable splint will, generally, produce a recovery by resolution. In fact, these joints, when freed from mechanical irritation, seem as ready to recover spontaneously from attacks of inflammation as any other portion of the body. I say these things to impress upon you that

the mechanical treatment is the main agent in effecting a cure, and that you may rely thoroughly upon its efficiency; but, at the same time, I do not wish you to neglect the general health and the diathesis. The health should be steadily promoted by every influence which is adapted to increase its tone and vigor; but, especially, you should take care, all through the case, that the patient shall never, for a single day, fall into the aplastic diathesis. If he does, he will find it a day of peril, for, if he undergoes the least degree of suppuration or caries, he will lose the joint. You are aware that, in the aplastic diathesis, suppuration and caries follow very moderate inflammations, while, in the plastic condition, they might not occur for years. I advise, therefore, that the patient shall have perfectly fresh air both night and day, never on any account being allowed to lodge or reside in crowded buildings. He should use animal food freely; and, if at any time marks of aplasticity show themselves, such as weak purulent eruptions, erysipelas, or other aplastic diseases, he should be immediately put upon the use of muriated tincture of iron, 40 drops every two hours, which may be assisted by the application of muriatic or sulphuric acid baths daily to the whole body.

It is very common to see blisters and issues recommended for this disease; but, in my experience, I have been able to get little benefit from them, and I have no hesitation in saying, that they are thoroughly uncertain and unreliable. If used at all, you should take care that you do not apply them directly to the joint, but at some distance above or below. I occasionally see considerable mischief done by placing the blisters directly upon the knee. The irritation of the blister is then so close to the disease that it spreads into and aggravates it. It, therefore, ceases to be *counter*-irritant, and becomes an irritation direct.

By this combination of mechanical and constitutional treatment, most of your cases can be cured in the first stage. If, however, one is brought to you, already in the second stage, there is no remedy but amputation or resection of the carious bone. If the patient is poor, and necessitated to get about for

his subsistence as soon as possible, perhaps, amputation is the best; but, if his circumstances enable him to give six months or a year to treatment, he may undergo resection, with a view to the saving of the limb.

I perceive that our time will not permit of a discussion of the curvature of the spine to-day, I shall, therefore, reserve that subject for another lecture.

Proceedings of Societies.

THE AMERICAN MEDICAL ASSOCIATION.

The Fourteenth Annual Session of the American Medical Association convened in Bryan Hall on Tuesday, June 2. There was a full attendance, most of the States being represented.

ASSEMBLING OF THE CONVENTION.

The Convention was called to order at 11 o'clock by WILSON JEWELL, of Pennsylvania, the first Vice-President of the Association during the last three years. The remaining retiring officers occupied seats on the platform, with the exception of the President, who is deceased. The following are the gentlemen who have held office since the year 1860:—

President.—ELI IVES, Connecticut.

Vice-Presidents.—WILSON JEWELL, Pennsylvania; A. B. PALMER, Michigan; R. D. ARNOLD, Georgia; JOSEPH N. McDOWELL, Missouri.

Secretaries.—S. G. HUBBARD, Connecticut; H. A. JOHNSON, Illinois.

Treasurer.—CASPER WISTER, Pennsylvania.

Rev. R. L. COLLIER, pastor of the Wabash Avenue Methodist Episcopal Church then invoked the Divine blessing upon the deliberations of the Association.

ADDRESS OF WELCOME.

The Address of Welcome to the Delegates was made by Dr. N. S. Davis, on behalf of the physicians of the City of Chicago and the State of Illinois.

It became his pleasing duty, on behalf of the profession of medicine in Chicago, as well as Illinois, he said, to welcome them, which he did with great pleasure. This was a new city, and, as a consequence, destitute of many of those attractions to be met with in other and older cities. Yet all the institutions of the East were here in their incipiency, and were flourishing. This city has grown in thirty years from an Indian tract to a population of one hundred and forty thousand people, and to a well-organized and highly-educated community. The public schools, academy of sciences, universities, colleges, historical society, and commercial structures, all proved how rapidly Chicago has progressed. They were welcomed, however, not to these, but to the hearts and homes of the citizens,—doubly welcome on account of the three years that had elapsed since their last meeting. The interruption was made from year to year, in the hope that they would again be able to meet from all sections of the country and extend the common hand of fellowship to all their brethren. But it was necessary to retain their organization, even though their brethren did not join in the convention. Nevertheless, he did look forward to the time when they could all again assemble under one flag, with one nationality, to resume their mutual researches into the secrets of that philosophy which bore so intimate a relation to the welfare of the whole family of man.

They were doubly welcome, because their society was not based on a selfish aim,—its end was to advance the educational and scientific interest of a profession whose aim and province it is to gather all the knowledge which tends to alleviate human pain, prolong human life, and perpetuate human happiness. For this great object they had travelled thousands of miles. The prairies in this State were broad, but not more open than their hearts, and, if they failed in doing all that could be wished for their comfort, it would be on account of the crowded condition of the city. He concluded by saying, that they had gathered as friends, and he believed that their business would be transacted in harmony and peace, and that when they adjourned it would be with the feeling that it was good to be here.

They were assembled in the midst of great national excitement, but their business would be transacted thoroughly and satisfactorily, because it did not conflict with the interests of any class, —it ministered to all. In the profession they were all patriots, all lovers of their country; and if, in their deliberations, they could bring out but one fact which would tend to alleviate the sufferings of those who were fighting for their country, they would be amply repaid. He again bid them doubly welcome.

REPORT OF THE COMMITTEE OF ARRANGEMENTS.

The Report of the Committee of Arrangements was then read by Dr. Davis. It contained an allusion to the unsettled state of the country, as the reason why the Annual Meeting had been postponed for two years. The last was held in 1860, in New Haven, Connecticut. In the following year,—1861,—the session was postponed on account of the wish that both sections of the country should, as usual, be represented, and it was hoped that before the next year the war would be ended. At the time when the next meeting fell due, many of the profession were absent in the hospitals. It was decided by the New York State Association last winter that a convention should be held this year; and, whether the action was judicious or not, it was indorsed by every society so far as heard from; and every journal in the States, except one, had spoken favorably of the movement.

It had been found impossible to secure aid from the railroad corporations, as they had made mutual agreement not to grant passes to conventions, and the Canal Convention was an exception to that rule. The attendance of delegates and prominent members was large, and indicated a satisfactory and profitable meeting. He then directed the attention of the members to the cards of invitation to the evening meetings, and requested their attendance. The Report was adopted.

NAMES OF DELEGATES IN ATTENDANCE.

The Roll of Members was then called by the Secretary. The following are the names of those present:—

Vermont.—J. N. Stiles, Lewis Emmons.

Massachusetts.—Henry Cutter, Appleton Thorne, Edward Barton, James P. Lynde, Ebenezer Stone, J. P. Kendall, Benj. E. Cotting, John Homans, John C. Dalton, M. D. Southwick, E. P. Abbe, John Green.

New York.—Henry G. Davis, Guido Furman, Alden March, Daniel P. Bissel, James S. Whaley, Thomas C. Brinsmade, J. S. Sprague, C. C. F. Fay, Edward Storck, E. S. F. Arnold, E. W. Cheeney, W. N. Blakeman, Howard Townsend, H. Nicholl, E. Tobie, H. S. Downs, C. C. Wyckoff, Alf. Underhill, J. H. Griscom, L. B Cotes, Julius Homberger, C. W. Harvey, James McNaughton, Daniel Holmes.

Connecticut.—Stephen G. Hubbard, L. N. Beardsley, B. H. Catlin, A. W. Barrows.

New Jersey.—Wm. Pierson, Jr., D. M. Sayre, John Blain, Isaac S. Cramer.

Delaware.—H. F. Askew, James Couper.

Pennsylvania.—Wilson Jewell, Wm. Mayberry, Edward Wallace, B. Richardson, John R. Thomas, E. H. Mason. Wm. L. Richardson, T. N. Troth.

Virginia.—J. C. Hupp.

Ohio.—W. S. Battles, J. M. Taggart, W. W. Jones, A. H. Agard, K. G. Thomas, S. O. Almy, L. M. Lawson, W. B. Davis.

Indiana.—B. S. Woodworth, A. M. Vickery, A. J. Erwin, A. P. Ferris, L. D. Personett, James Ferris, S. A. Freeman, L. D. Glazebrook, James F. Hibbard.

Michigan.—A. B. Palmer, E. A. Egerry, H. O. Hitchcock, S. D. Richardson, Lewis Davenport.

Illinois.—E. L. Holmes, Geo. K. Amerman, Edmund Andrews, John Ten Broek, C. R. Parks, T. D. Fisher, Geo. W. Hall, David Prince, E. Andrews, N. Wright, W. O. Chamberlain, R. Rouse, E. A. Steele, A. Fisher, M. J. Johnson, J. H. Hollister, D. Pierson, M. F. Dewitt, S. Wickersham, J. P. Ross, Henry Wing, Chas. Gorham, S. W. Noble, Ira Hatch, T. F. Worrell, F. B. Haller, H. A. Johnson, R. Spitler, G. Paoli, H. Noble, D. M. Tucker, Orrin Smith, A. J. Crain, T. K. Edmiston, J. J. Lake.

Wisconsin.—Chas. L. Stoddert, H. Adams, Harmon Van Dusen, E. S. Carr, D. Wilber.

Iowa.—J. W. H. Baker, Samuel C. Lay, Jos. Sprague, D. L. McGugin.

Kansas.—D. W. Stormont, C. A. Logan.

Tennessee.—W. K. Boling.

Army and Navy.—C. C. Cox, J. Simpson, A. R. Terry, John B. Porter, Benj. Palmer, M. K. Taylor, Ralph N. Isham.

The Secretary announced that in regard to returning members of this Association to their homes, the Secretary of the Canal Convention had signified that they were at liberty to become recognised as delegates to the Canal Convention by registering their names with him.

COMMITTEE ON NOMINATIONS.

The delegates from the several States then resolved themselves into sub-committees, and appointed their representatives on the Committee for Nomination of officers, as follows:—

Vermont.—J. N. Stiles.
Massachusetts.—John Homans.
Connecticut.—L. N. Beardsley.
New York.—Jos. McNaughton.
New Jersey.—John Blain.
Delaware.—H. F. Askew.
Ohio.—W. S. Battles.
Indiana.—James F. Hibbard.
Pennsylvania.—Wm. Mayberry.
Michigan.—H. O. Hitchcock.
Kansas.—D. W. Stormont.
Virginia.—John C. Hupp.
Iowa.—J. H. W. Baker.
Wisconsin.—H. Van Dusen.
Illinois.—H. Noble.
Tennessee.—W. K. Boling.
Maryland.—Dr. Cox.
The Army.—Joshua Simmons.

VALEDICTORY ADDRESS BY THE ACTING-PRESIDENT.

Dr. Wilson Jewell, Acting-President of the Association, then delivered his Valedictory Address. Since their last meeting, he remarked, the most tremendous events had transpired; the country had been plunged into civil war, and the best government that ever existed on the face of the earth had trembled as on the brink of dissolution. It was not strange if the troublous element had found its way into their counsels, yet he had hope still that the present struggle would be gloriously ended by a restoration of the Union- The cause was based on the eternal principles of civil and religious liberty, and could not fail.

The speaker then turned to the subject which was most intimately connected with the objects of the Convention, and spoke of the noble part taken in the struggle by the devoted members of the professson, who, amid the thunders of battle and the din of arms, worked firm and self-possessed to mitigate the horrors of the strife, and risked being killed or taken prisoners of war rather than desert the path of duty. Theirs' was no warrior's ambition; they were stimulated by no wish, save that of alleviating human suffering. Many of their members were in the army, and some slept the sleep of death. First, and highly valued among them, was their respected President, Eli Ives, whose knowledge and experience had rendered him so valuable a medical practitioner, and whose private virtues endeared him to all. The future usefulness of the Association was one of the great aims of their late President, and he predicted great things of its future.

The orator then took a retrospective view of the progress of the Association, and spoke of the signs, in the present condition and standing, which point to a bright and influential future. He quoted passages from many eminent medical men, in which the future of the Association was spoken of and hints for improvement given. He would, however, direct their attention to another subject, not that he loved Cæsar less, but Rome more. He would speak of Hygiene, a science which bears no modern date, but claims its origin in the antedelluvian age, is

now so little understood, and presents an illimitable field for research. The fearful responsibilities of their calling should stimulate them to a thorough course of study in all that pertains to the preservation of health, the extension of the term of existence, and the alleviation of disease where prevention rendered impossible. There was room to hope that the American Medical Association would throw out a light, which, in the medical world, would equal the refulgence of that bright ray which shone out from the retreat of the Wittenburg student and dissipated the darkness which until then brooded over the theological firmament. Yet this illustration could ensue only upon a careful study of the laws of Hygiene. Not that the subject was incompatible with the design of the Association; it had done great service in that department, and time would fail to tell the aid rendered by it in the past. But the vestibule of the Hygienic temple alone had as yet been attained. The method of curing disease had, heretofore, attracted not too much of attention, but it had, perhaps, thrown into the background those sanitary considerations which will teach how to prevent disease by conformity to the laws of health. This was a reform much needed, but there seemed to be a perpetual obstruction presented to its progress, and a private prejudice in the popular mind against it. He would propose a two-fold method whereby the evil might be remedied. It was to elevate Hygiene as a branch of scientific study, and give it a distinct chair in the medical colleges. He would constitute it as a cirriculum of study which was essential to the reception of a diploma. He counseled also the adoption of some more popular and successful plan than had otherwise been pursued, for enlightening the public mind on the relations of preventive measures to the health of the people. The etiology of disease was the basis of the science of preventive medicine. This being better understood than formerly, and one of the good fruits springing out of the present struggle would be the elimination of a multitude of facts bearing on the relations of military discipline to military health, and the consequent efficiency of the soldier. These facts were of incalculable value, and would exercise a largely beneficial

influence upon the health of future ages. Already a work of this kind had been authorized by the general government, which will contain an elaborate classification of military diseases and the influence of hygienic regulations thereupon. The time was, probably, not far distant when each State would have its bureau of health, and recognize the indissoluable relation existing between sanitary conditions and moral developments, as well as on the physical organism. Already two cities of the Union had taken vigorous action in this matter, and the Garden City might well claim the credit of having set the example of aiming to insure civic healthfulness. He recommended that the word "Hygiene" should be written in letters of gold on the escutcheon of the Association.

On motion of Dr. Sprague, of New York, the thanks of the Convention were given to the retiring President for his able, eloquent, patriotic, and scientific address, and a copy was requested for publication.

CANDIDATES FOR PERMANENT MEMBERSHIP.

The Committee of Arrangements then reported the following as names of gentlemen who were candidates for permanent membership, and recommended their admission:—

Walter Hay, Thomas Bevan, John McAllister, John Bartlett, M. O. Heydock, Niel P. Peterson, R. C. Hamill, H. N. Hurlbut, .V L. Hurlbut, and H. Webster Jones, of Chicago; E. C. Lardner, of Vermont; S. W. Bicknell, Beloit; E. W. Jenks, of Sturges; Henry Durham, LaSalle: Silas Earle, Onarga; and W. W. Sedgewick, of Sandwich. The candidates were unanimously elected.

The following were then elected as members by invitation:—

A. L. Merriam, Sandwich, Ill.; L. D. Glazebrook, St. Pierre, Ind.

The President then appointed Drs. Pearson, Beardsley, and Cutler to draft resolutions expressive of the sense of the Association respecting the death of the late President.

The Convention then adjourned till 3 o'clock.

AFTERNOON SESSION.

The Convention reassembled at 3 o'clock, and the Committee on Nominations was called to make their Report. They recommended the following

FOR OFFICERS:—

President.—Dr. ALDEN MARCH, of New York.

Vice-Presidents.—Drs. JAMES COUPER, of Delaware; DAVID PRINCE, of Illinois; C. C. COX, of Maryland; and E. S. CARR, of Wisconsin.

Secretaries.—[Not to be appointed until the place of the next meeting is known.]

Treasurer.—Dr. CASPAR WISTAR, of Philadelphia.

REPORT OF THE TREASURER.

The Report of the Treasurer was read by Dr. Askew, of Delaware, the Treasurer being unable to attend. He reported that, owing to the unsettled state of the country and the advanced price of printing, it would be necessary to print only such papers as were of great value, and to condense those as much as possible, or the treasury could not bear the cost. The proceeds of volumes sold were $1,982 25. Balance on hand last year, $597 61; balance on hand this year, $504 21. The Report was adopted.

The Committee on Publication reported the result of their labors during the year, and the number of volumes now in their possession. The Report was accepted.

AN UNUSUAL CASE.

Dr. Griscom, of New York, reported a very interesting case of diarrhœa adiposa which occurred in the New York Hospital, under his notice; it was cured by the free use of whiskey and porter, but, on being placed in the House of Detention, and thus debarred from its use, the symptoms returned. The speaker said that the case was a very unusual one, not more than twenty-six cases having ever been reported. He considered that the commonly received opinion, that abnormal acretions of oleaginous substance arose from pancreatic secretion was unfounded.

REPORT ON PRIZE ESSAYS.

The Report of the Committee on Prize Essays was read by Dr. D. L. McGugin, of Iowa. He reported that only one essay had been received, which is worthy of the prize medal. It is an inquiry into the properties and physiological uses of Veratrum Viride, with notices of its alkaloid, Veratria, as derived by certain processes. He considered the essay as worthy of publication and of the prize.

Dr. Lawson moved that the prize be awarded to the author, and the paper forwarded to the Committee on Publication.

Dr. Cox moved that the essay be referred to a special committee, of which Dr. McGugin shall be chairman, and read the essay, and report at some future time.

The motion of Dr. Lawson prevailed, and the name of the author was then announced,—Samuel R. Percy, M.D., Professor of *Materia Medica* and Therapeutics in the New York Medical College. The announcement was received with cheers. The prize is one hundred dollars.

The Report of the Committee on Nominations was made and accepted. The nominations were accepted, and the gentlemen were conducted to their places on the platform by a delegation of two to each appointed by the Chairman. The newly-inducted President briefly returned thanks for the honor conferred.

REPORTS OF SPECIAL COMMITTEES.

Reports of Special Committees were then called for. A communication was received by Dr. Davis from Dr. E. R. Squibbs, of New York, Chairman of the Committee on "the practical workings of the United States Law relating to the inspection of drugs and medicines," stating that he could not attend, and offering to report next year. Agreed to.

Several other gentlemen presented in person the request to be allowed to continue, with the same result.

Dr. A. K. Gardner, of New York, presented a paper on the use and abuse of pessaries, but the reading was postponed till this morning.

No changes were made in any of the committees, and they were all continued for another year.

THE HUNTER MEMORIAL.

The Committee on the Hunter Memorial reported that the sum of $357 had been raised, in one dollar subscriptions, towards the Hunter fund, a portion of which had been forwarded to London. The smallness of the contribution was imputed mainly to the fact that the monument would stand on British soil, and the indifference felt by England about the present national trial had checked the enthusiasm. The Report was contained in a letter from Dr. Bowditch, which was received and placed on file. It was also decided that the account be closed and the balance retained by Dr. Bowditch.

NEW MEMBERS.

The Committee of Arrangements proposed the following gentlemen to be elected as permanent members:—

Drs. Daniel B. Brengle, Manchester; Van Courtland Secord, Galena; J. B. Samuel, Carrolton; David Dodge, Chicago; James S. King, Lemont; D. F. Crouse, Mount Carroll; all of Illinois. The nominations were confirmed.

THF USE OF MERCURY BY THE ARMY-SURGEONS.

Dr. Lawson called attention to the recent order of the Surgeon-General prohibiting the use of mercurials and tartarized antimony by the army Surgical Corps. He moved that the Society express its disapprobation of the order. The subject was referred to a committee, with instructions to inquire into the facts and report, the committee to consist of one member from each State.

MEDICAL PROVISION FOR RAILROAD ACCIDENTS.

Remarks were then made by Dr. Arnold, of New York, on the necessity of making medical provision for railroad accidents. He distributed printed copies of papers read by him before the State Medical Society and the Academy of Medicine, both of New York.

ARMY-SURGEONS.

Dr. Cox called attention to the want of a recognition of Army-Surgeons, and urged that relative rank should be accorded to them. At present it was not possible for a Surgeon to rise

above the rank of Major. He, therefore, offered the following Resolutions:—

Resolved, That a Committee of five be appointed by the chair to draft a memorial to Congress asking the enactment of a law by which Surgeons in the service of the United States Army may be accorded relative rank in the same.

Resolved, That each medical gentleman present be urgently invited to use every proper influence with the Members of Congress from his respective district, to urge the passage of a law, favorable to the object, at the ensuing session of Congress.

The resolutions were seconded by Dr. McGugin in an able speech, in which he reviewed the relative responsibilities of the Surgeon and Commander, and spoke of the injustice perpetrated in the case of the former. The resolutions were discussed by several other delegates, and were, finally, adopted.

The Convention then adjourned till 9 o'clock A.M.

WEDNESDAY MORNING SESSION.

The Minutes of the previous sessions were read and approved.

A large number of additional members from several States were announced as having arrived and registered their names as delegates, including a large number of the physicians and surgeons of this city.

The following gentlemen were admitted as members of the Association, by invitation:—

Dr. J. H. Foster, Libertyville, Ill.; W. G. Millar, Rockford, Ill.; J. A. Brown, Kankakee City, Ill.

The following permanent members of the Association were elected:—

Tiffin Sinks, Leavenworth, Kansas; W. C. Hall, Fayetteville, O.; Hiram Wanzer, Chicago, Ill.; H. K. Dean, Maunkport, Ind.; H. C. Robbins, Newark, Ill.; E. J. Duffield, Woodstock, Ill.; W. Jaynes, Yankton, Dakota Ter.; C. M. Clark, Galva, Ill.

The Reports of Committees being in order, on motion, that

of the Committee on Medical Education was postponed until the afternoon session.

The Committee on Appointments made their report, which, on motion, was accepted. Pending its adoption, it proposing Baltimore, Maryland, as the next place of meeting, considerable discussion arose, various members proposing different places. The member from Maryland advocated the feasibility of appointing the next meeting at Baltimore, as a national measure. It is for the interest of the Association and the country to hold the meeting *as far South as possible.* The effect of holding it at Baltimore would be a healthy one upon that city and its medical interests. Men of wealth and influence would open their doors and extend warm hospitality to the members of the Association. The question finally resolving itself into a choice between Baltimore and New York City, the latter was unanimously voted for as the place for holding the next meeting.

The balance of the Report, concerning the officers of the next meeting, committees, etc., was referred back to the Committee for reconstruction, rendered necessary by the substitution of New York for Baltimore.

On motion, a committee, consisting of one member from each State, was appointed to investigate and report upon the present and a better ambulance system in the Army of the United States.

A resolution of thanks to Dr. Wilson Jewell, late Acting-President, for the able and dignified manner in which he has presided over the deliberations of the Association was unanimously adopted.

A resolution, requiring the appointment of a committee to urge the compulsory vaccination of every person in the United States, was referred to the Section on Hygiene.

The Report of Dr. A. K. Gardner, of New York, regarding the use and abuse of pessaries, the reading of which was yesterday postponed until this morning, was called up, as next in order, and, on motion, the reading of it postponed until next year.

The Committee appointed to prepare suitable resolutions

appropriate to the loss of the Association by the death of its late President, the late Dr. Eli Ives, of Connecticut, made their Report, which, after a slight amendment, was adopted.

The Committee on Voluntary Communications presented an abstract of a paper by Dr. Andrews, of Chicago, on "Diathesis, —their surgical relations," which was read by the author. Approved, and referred to the Committee of Publication.

This paper of Dr. Andrews called up Dr. Hibbard, of Indiana, who combatted, in a rather lengthy speech, some of the principal features presented.

Dr. Andrews replied, in support of his arguments and statements, developing, from his experience, the truth of the position which he assumed.

Other members participated in the discussion.

The meetings of Sections having been abolished, the President appointed as the Committee on Compulsory Vaccination, which had previously been referred to the Section on Hygiene, Drs. Hibbard, of Indiana, Jewell, of Pennsylvania, and Griscom, of New York.

The meeting then adjourned until afternoon.

AFTERNOON SESSION.

According to a resolution passed this morning, Dr. D. J. Macgowan, of New York, from China and Japan, was invited to address the Association. He explained to the meeting the professional bearings of his proposed scientific and industrial expedition to the unknown parts of Eastern Asia. Investigation in relation to the history of epidemics, in the *Materia Medica*, and into the ethnology of those lands, cannot fail to elicit many facts which promise to be of incalculable value to medicine and the collateral sciences. Dr. M. further expressed a hope that the Association would take some measures to induce the Haytien Government to undertake the acclimatization of Cinchona trees, (quinine plants.) He gave an account of the success of the Dutch in Java, and of the English in India, and fully believes that in St. Domingo these invaluable plants might be readily cultivated, and thus secure additional supplies of this great remedy in fevers.

Dr. Macgowan has been in correspondence with the Haytien Ambassador in Washington on the subject, and solicits the influence of the profession in urging the institution of the necessary experiments in those portions of America, north of the equator where the soil and climate seem to afford sufficient encouragement.

In the course of his remarks, the speaker gave an account of the standing of the medical profession in China and Japan, of their medical literature, &c., also stated the remarkable fact that they had made many discoveries in the use of remedies for certain diseases, in some cases either actually the same or very similar to those discovered and used here.

The Chairman of the Committee of Arrangements announced the following names of physicians who were elected permanent members:—

J. B. Buchtell, South Bend, Ind.; C. Truesdale, Rock Island, Illinois; L. F. Warner, and M. Parker, of Chicago. Drs. L. T. Hewins, Oak Alla, Wis., and C. J. Taggart, Beloit, were elected members by invitation.

Dr. C. C. Cox, from the Committee on Medical Education, read an able scientific paper on the subject, reviewing the past history of the profession in this respect, and the absence of proper attention to the subject. Many valuable suggestions, as to needed improvements, were also made. After the rendering of this Report, the Committee submitted the following resolutions, which, after discussion, were adopted:—

Resolved, That a preliminary education in English, Latin, Mathematics, and Physics, constitute an essential pre-requisite to the admission of a student of medicine into the office of a medical preceptor, or as a matriculant of a respectable medical college.

Resolved, That the advancement of medical education demands a more extended and symmetrical course of instruction in the colleges, and a more thorough and impartial examination for the degree of Doctor of Medicine than at present prevails.

Resolved, That Medical Jurisprudence and Hygiene are

highly important branches of Medical Science, deserving the careful consideration of all medical teachers and schools.

Resolved, That societies for medical improvement,—State, district, and county,—are important auxiliaries to the advancement and promotion of science, and are, therefore, highly recommended by this body, as valuable levers in the cause of medical education.

The Committee appointed to make a report upon the recent order of the Surgeon-General, prohibiting the use of mercurials and tartarized antimony by the Army Surgical Corps, made a majority report through Dr. Lawson, of Cincinnati, and an entirely antagonistic minority report by Dr. Woodworth, of Indiana. The former strongly favored the use of these remedial agents in the Army, and the latter as strongly discountenanced their use there. Each report was backed by resolutions rigidly endorsing the language of the report; after an animated discussion, the Association adjourned.

THURSDAY MORNING SESSION.

The Association convened at 9 o'clock. After a partial reading of the minutes, the further reading was dispensed with.

The following gentlemen were admitted members by invitation:—

Isaac Snyder, Jackson, Mich.; R. B. Treat, Janesville, Wis.

The following were admitted as permanent members:—

Granville S. Thomas, Joliet, Ill.; J. S. Pashley, Osceola, Ill.

Dr. Cox, of the army, announced the sudden departure of Dr. Wilson Jewell, of Pennsylvania, caused by receiving intelligence of the unexpected death of a son, and offered a resolution of condolence, which was adopted.

Regular business being in order, the reports of Committees were taken up.

Dr. Gilbert, of the army, in behalf of the Committee on the extinction of the Aboriginal Races, reported progress; and, on motion, the Committee was continued another year.

The President having announced that the order of the Surgeon-General, U. S. A., debarring calomel and tartar emetic from the use of army-surgeons, and which was previously referred to a Committee, was in order; by consent of the Association the Committee on the subject offered a substitute for the resolutions introduced yesterday.

Pending the discussion, previous to the vote, Dr. Cox, of the army, said, substantially as follows:—

While the Association had the right to protest against the order of the Surgeon-General, he wished it to remember that the order referred, exclusively, to the corps of army-surgeons under his control, and had no reference to the use of those drugs in private practice. The order originated in the abuse of Calomel by a number of incompetent surgeons in the army, appointed by the Governors of the several States, who consider the *liver* the pack-horse of the human system. The Medical Bureau of the United States comprises men of science, who understand how far the evil has been perpetuated and the necessity of correcting its abuses. The fact that other mercurials have not been interfered with, shows how great the necessity that exists for an order so apparently sweeping, and which the Association deems so arbitrary.

He did not desire to protract the debate, but felt it due his position to say something before the final vote should be taken. He was not up either to defend or condemn the order. In a long practice he had seen the abuse of calomel in improper hands, as well as its benefits from its legitimate and judicious use. He wished a discrimination to be made between the propriety of the order and the motives of the Surgeon-General. That gentleman's high character and motives are not to be questioned in this or any other public body. He deserved the thanks of the profession for the wholesome interest he had taken in the subject.

Dr. Cox's position called up several members in reply. Calomel had fallen under the ban of an "unwise, unnecessary, and unprofessional order," and that order received animadversion, ridicule, and unstinted opposition. The discussion became

general, and while some desired to place no obstacles in the field, their opinion of the order was of a character that culminated in the following resolutions, which were adopted:—

Resolved, 1.—That this Association condemn, as unwise and unnecessary, the circular of the Surgeon-General prohibiting the further supply of Calomel and Tartar Emetic for use in the Army; and that we regard such an order as an indignity to the military surgeons, while it is in direct opposition to the opinions of the regular profession of medicine.

Resolved, 2.—That the withholding ordinary medicines from the army-surgeons implies a want of confidence in their skill as a body, which, if true, calls for the prompt interposition of the proper authorities; but if the imputation of a want of skill is unfounded, as we believe it is, the refusal to supply proper medicines is wholly unjustifiable.

Resolved, 3.—That Circular No. 6 being impolitic and prejudicial to the interests of the service, it is the decided sense of this Association, that a due regard for the welfare of the Army requires, and we do, therefore, earnestly recommend, the recision of that Circular, and the substitution of the more just and philosophical method of correcting abuses, if any exist, by holding each surgeon, individually, responsible for the proper discharge of his appropriate duties.

The entire report, giving a history and details of the subject, in the same spirit, was also adopted.

On motion, it was resolved that a copy of the above resolutions be forwarded to the President of the United States, the Surgeon-General, of the United States Army, and the Secretary of War.

The Nominating Committee reported back the following officers of the Association for the present year:—

Secretaries.—Dr. H. A. Johnson, Ill.; Dr. Guido Furman, N. Y.

Committee of Arrangements.—Drs. James Anderson, N. Blakeman, T. M. Markœ, T. C. Finnell, Austin Flint, Jr., E. S. F. Arnold, J. H. Griscom.

Committee on Prize Essays.—Drs. D. F. Condie, Pa.; E. Wallace, Pa.; Wilson Jewell, Pa.; E. R. Peaslee, N. Y.; Alfred Stille, Pa.

Committee on Medical Education.—Drs. J. C. Dalton, N. Y.; M. L. Linton, Mo.; John Frissell, Va.; Howard Townsend, N. Y.; W. H. Byford, Ill.

Committee on Medical Literature.—Drs. L. M. Lawson, Ohio; D. L. McGugin, Iowa; William Mayberry, Pa.; H. Noble, Ill.; John Homans, Mass.

Committee on Publication.—Drs. F. G. Smith, Chairman, Pa.; Caspar Wistar, Pa.; Ed. Hartshorne, Pa.; H. F. Askew, Del.; S. G. Hubbard, Conn.; H. A. Johnson, Ill.; Guido Furman, N. Y.

Committee on Insanity.—Drs. Ralph Hill, Ohio; C. H. Nichols, D. C.; D. P. Bissell, N. Y.; S. W. Butler, Pa.; John S. Butler, Conn.

Dr. H. G. Davis commenced reading a paper on "The American Method of Treating Joint Diseases and Deformities," which was referred to the Committee of Publication, and its further reading suspended.

Dr. Homburger read a paper upon the use of the laryngiscope, exhibiting the instruments, and another upon a case of disappearance of the iris behind the lens. Referred to Committee of Publication.

The paper of Dr. Griscom, on a case of diarrhœa adiposa, (read on Thursday afternoon,) was, on motion of Dr. Furman, referred to the Committee of Publication.

Dr. A. Fisher read a paper on the use of the Sulphites of Lime and Soda in the treatment of hospital gangrene, phlibitis, erysipelas, and other zymotic diseases. On motion, the paper was referred to a committee of three, of which the author is chairman, to continue his investigations, and report next year.

Dr. Cox, of the Army, offered two resolutions,—one of thanks to the Citizens of Chicago, for their kindness and hospitality shown to the members of the Association during its sessions here, and another of thanks to the retiring Secretary, Dr. Hubbard, for his able and faithful services.

The Amendments to the Constitution of the Association, proposed at the last meeting, were called up, discussed, and rejected.

A complimentary resolution, thanking the President and Secretary for their services, was adopted.

The following gentlemen, on motion of the Committee of Arrangements, were elected permanent members of the Association:—

L. H. Cary, Toledo, Iowa; Horatio Hitchcock, Chicago; L. F. Warner, Chicago; L. P. Cheney, Chicago; C. W. Shumway, Chicago.

Adjourned till 3 P.M.

AFTERNOON SESSION.

The Convention assembled and was called to order by the President, at 3 o'clock. The minutes of the morning session were read and approved.

A letter was read from Dr. Russell, of Mt. Vernon, Ohio, asking to be excused from further service on a special committee. On motion, he was excused. A similar communication was also read from Prof. Sager, of Michigan, and disposed of in the same manner.

Dr. N. S. Davis offered an amendment to the Constitution, providing for the appointment of one permanent Secretary. Under the rules, the amendment lays over one year.

The Committee on Nominations reported the appointment of numerous gentlemen to act upon various matters that might come before the next annual meeting.

The following resolution was offered by Dr. Arnold, and passed:—

WHEREAS, The railroad is fast becoming the great medium of land travel in all parts of the world; and, whereas, in spite of all regulations and care, serious accidents are continually occurring, attended with loss of life, such being greatly augmented by the total want of any local medical provision to meet such, as well as by the absence of any appliances whatever, calculated to strengthen the hands of the surgeon; therefore, be it

Resolved, That such medical provision shall be made by the railroads; and that by the diminution of suffering, as well as by the saving of life, while economy will accure to the railroad companies, and the interests of humanity greatly served.

A lengthy memorial was received and read from the Special Committee appointed to address Congress in relation to the rank and pay of army-surgeons. On motion, the Report was accepted and adopted.

On motion, the Secretary was instructed to have the Memorial printed, and to send copies of the same to public officers at Washington.

After some further proceedings of an informal nature, the Convention adjourned.

ESCULAPIAN SOCIETY.

Abstract of the proceedings of the Esculapian Society of Wabash Valley.

The Society met at Marshall, Ill., May 27th, 1863. Dr. CHARLES JOHNSTON was called to the chair.

Present, Drs. J. M. STEELE, F. R. PAYNE, JOHNSTON, GORHAM, HOLMES, RINGLAND, and MITCHELL.

Drs. E. A. STEELE, J. A. PATTON, and R. F. WILLIAMS were elected members of the Society.

Dr. F. R. PAYNE read a short paper on the nature and treatment of corns. He urgently recommended the use of pure nitric acid as a reliable remedy for all varieties of corns and bunions. He does not scrape the corn, but applies the acid directly to the diseased surface every four or five days. It produces no pain, and gives almost instant relief.

Dr. MITCHELL requested an expression of the members in relation to the nature and treatment of granular conjunctivitis. He believed it to be an idiopathic disease, caused by miasmatic influence acting on persons pre-disposed to scrofula. The granulations first appear, and, by their irritating influence, inflammation is produced and thickening of the membranes,

resulting in opacity of the cornea. He learned from Dr. GROSS, while he was a resident of Louisville, that the most of his cases of this disease came from Wabash Valley.

Dr. STEELE remarked, that the physicians in the country could not treat cases of sore eyes with the same success as oculists, who make it a specialty, from the fact that patients are not constantly under their control and remedies could not be repeated as often as they should be. He believed that granulations were the result of inflammation. He had but little, in the treatment of the disease, but favored the use of anodyne and emollient applications as the main remedies.

Dr. PAYNE remarked, that the disease was one that had perplexed him for years. It was his opinion that the enlargement of the mucous follicles was the result of some grade of inflammation (either acute, sub-acute, or chronic,) of the conjunctiva. The irritation caused by these enlarged follicles produces inflammation of the cornea, thickening of its coats, and loss of sight. He believed, with Dr. MITCHELL, that this was more prevalent in miasmatic districts. He *had* treated the disease by cauterization and the knife for some years, but not with satisfactory results. His only treatment now was the use of a lotion composed of

Rose water, ...ℨj.
Iodide of zinc,.....g. ij. to vj.

applied freely to the ball of the eye every morning, and, during the balance of the day, he employs the following mixture:—

Rose water,.....ℨj.
Morphine,.....
Sulph. zinc, ...āā. gr. x.

applied frequently to the closed lids.

Dr. Ringland thought these granulations to be, generally, the result of severe and protracted inflammation. In some cases, especially where there are evidences of a scrofulous diathesis, very little inflammation precedes their formation.

In the great majority of cases, he thought very little benefit was to be derived from the use of strong caustics applied to the

interior of the lids. He much preferred mild astringent and anodyne lotions, similar to those employed by Dr. PAYNE. If the irritation can be allayed, it will do much toward enabling nature to rid the parts of disease. Constitutional treatment should be employed where any unhealthy condition of system requires it; but it is often a purely local disease.

Dr. GORHAM said, he had but a limited experience in the treatment of this disease. His favorite remedy was

Rose water,.....℥j.
Sulph. zinc,.....grs. ij. to vj.
Morphine,.....v.

applied freely to the eye by means of a wide-mouthed bottle, (a morphine bottle answers the purpose very well). He instructs the patient to open and close the lids several times during the application, that the lotion may reach the whole of the diseased parts. In common inflammation of the eye, he had great faith in a solution of tartaric acid (v. to x. grs. to the oz.,) as a remedy. He deprecated the use of strong caustics to the eye.

Dr. J. M. STEELE had never treated a case of this disease. It does not prevail in his locality, so far as he knows. He has treated many cases of acute inflammation of the eye, which he generally arrested in a short time by free purgation with sub. mur. hyd., cupping the temples, and cold emollient applications. After the cathartic operates freely, he gives from twenty to thirty grains of quinine, divided into doses of three or four grains each. After the acute stage has passed, he uses a solution of acet. plumb. and opium.

Dr. Johnson had treated many cases of ophthalmia successfully, but his treatment of the granular disease was very unsatisfactory- His remedies were very simple. In the early stages, he required his patients to strictly observe a supine position; and he employed cold applications to the eye when the patient would bear them, otherwise, they should be warm. After the inflammation is somewhat reduced and there is a secretion of pus, he applies a solution of nit. arg. of a strength suited to the case. When an astringent is required, he prefers and infusion of cinchona and tannin.

Dr. HOLMES called for an expression of opinion in relation to the best method of treating puerperal peritonitis. Many cases had come under his care, and he was not satisfied with the result of his treatment.

Dr. J. M. STEELE was very confident his treatment of that disease was right, as it was so uniformly successful in curing his patients. He has treated many cases of it. After free purgation with sub. mur. hyd., with oil and turpentine at the onset of an attack, he mainly relied on the use of opium. In miasmatic regions, he would combine quinine with it for several days, in sufficient quantity to destroy the malarious influence; and, where a low typhoid grade of fever follows, he would continue it as a stimulant. If the tongue was dry and the secretions scanty, he adds to the opium three to six grains of sub. mur. hyd. daily. He moves the bowels every day with a mixture of two parts castor oil and one of turpentine, without stopping the opium. Large emollient poultices should be applied so as to cover the whole surface of the abdomen.

Dr. RINGLAND generally prescribed a mercurial cathartic at the commencement of an attack of this disease. His principal reliance was on opium. He gives it in sufficient quantity to produce a decided sedative impression. Where the patient is under miasmatic influence, he would combine quinine in moderately full doses for a day or two. He has frequently observed a decided improvement take place immediately after the operation of a second mercurial cathartic, administered after the continuous use of the opium for a few days. Warm emollient poultices are valuable adjuvants to the other treatment.

Dr. PAYNE had not treated a great number of cases of this disease. He agreed with Dr. STEELE. It was always his aim, after free purgation, to bring the patient under the influence of opium, and keep it up until the disease was arrested. If the pulse is not over 130, he feels confident this treatment will save the patient. He uses turpentine freely, both internally and externally. He prefers, for a poultice, the polygonum hydropiper, applied over the seat of pain.

Dr. J. M. STEELE inquired, whether any of the members had

used the Bromine mixture in the treatment of erysipelas. No one had used it, but each gave his favorite treatment in this disease. Dr. PAYNE relied, principally, on the alcoholic tincture of iodine, locally, and the mur. tinct. iron, internally. Dr. J. M. STEELE'S favorite local remedy was the mur. tinct. iron. Dr. JOHNSON preferred a mixture of ung. hyd. one part, and lard three parts, applied to the diseased surface, covered with a heavy coat of very finely powdered starch,—much as he would treat a burn. Dr. MITCHELL considered the carb. lead or common white paint, the best local application.

The value of some new remedies were discussed. Dr. J. M. STEELE urged the members to give Bromine a fair trial in erysipelas.

Dr. PAYNE recommended tinct. arnica as a valuable new remedy in all bruises and sprains,—applied locally. He had employed tinct. aconite in many cases of neuralgia, and he regarded it as a good local remedy in that disease.

The Society adjourned; to meet at Grandview the last Wednesday of October.

GEORGE RINGLAND, *Secretary pro. tem.*

Book Notices.

CHEMISTRY: By WILLIAM THOMAS BRANDE, D.C.L., F.R.S.L. & E. of Her Majesty's Mint, Member of the Senate of the University of London, and Honorary-Professor of Chemistry in the Royal Institution of Great Britain; and ALFRED SWAINE TAYLOR, M.D., F.R.S., Fellow of the Royal College of Physicians of London, and Professor of Chemistry and Medical Jurisprudence in Guy's Hospital. PHILADELPHIA: BLANCHARD & LEA. 1863.

This is a full-sized octavo volume of 696 pages, closely printed, but in fair type. From the hasty examination we have been able to give it, we think it will be found to be one of the best text-books for students that have been published, and also a good work for reference for the general practitioner. The following, from the preface, will give an idea of the general character of the work:—

"In addition to the general properties of bodies, we have, attached to the description of each substance, a summary of its most important characters, with an account of the special tests required for its detection. The student will thus have in this book a manual of practical chemistry. As an adjuvant to this branch of the science, the subject of practical toxicology has been introduced in reference to the most important *poisons*, and the processes for their detection. We have also treated, as fully as our space would permit, the chemical principles on which *photography* is based, and have given some practical rules for the guidance of those who wish to apply their chemical knowledge to this interesting art."

For sale by W. B. Keen & Co., Booksellers in this city.

Diseases of the Skin: By Erasmus Wilson, F.R.S. Fifth American, from the fifth and revised London edition, with plates and illustrations on wood. Philadelphia: Blanchard & Lea. 1863.

This is a new edition of a well-known work, which has been before the profession for twenty years. It is worthy of the careful study of every student, and will be found profitable in the library of every practitioner.

In this edition, the American publishers have very properly added to the plates those prepared by Mr. Wilson, to illustrate his work on "Constitutional Syphilis and Syphilitic Eruptions." The volume contains 694 pages and is published in a good style.

For sale by W. B. Keen & Co., Booksellers, Chicago.

Obstetrics: The Science and Art. By Charles D. Meigs, M.D., lately Professor of Midwifery and the Diseases of Women and Children in Jefferson Medical College at Philadelphia, &c., &c., &c., &c.
Fourth edition revised, with 129 illustrations. Philadelphia: Blanchard & Lea. 1863.

The high and well-earned reputation of Dr. Meigs, together with the well-known character of his work on *obstetrics*, renders it unnecessary for us to enter upon any details in regard to the present edition. It is issued in the very best style of the pub-

lishing art; and is eminently worthy of the study of every student and practitioner of midwifery.

For sale by W. B. Keen & Co., Booksellers, Chicago.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF SOUTHERN CENTRAL NEW YORK, AT THE 12TH, 13TH, 14TH, AND 15TH ANNUAL MEETINGS, HELD IN 1858, '59, '60, AND '61. BINGHAMTON: WM. S. LAWYER, Printer, 1863.

This is a pamphlet of 80 pages, neatly printed on fair paper. It contains the record of proceedings of four Annual Meetings of the Society, and several of the more interesting and directly practical papers read at the several meetings. We regret that the funds in the treasury did not permit the publication of all the papers and addresses which have been read to the Society. What has been selected, however, is of practical value, and will be read with interest.

AMAUROSIS AND SMOKING.—At the Royal London Ophthalmic Hospital, a severe case of amaurosis was lately presented, evidently brought on by the immoderate smoking of tobacco. Examined with the ophthalmoscope, both optic nerve disks were found partially atrophied; the apparent inner half of each white, the outer red and hyperæmic. Mr. Wordsworth pointed out the case to the class as one of "tobacco amaurosis," of which he had lately seen several in excessive smokers, with similar symptoms. This form of amaurosis he considered quite incurable.—*Boston Med. & Surg. Journal.*

CALOMEL AND TARTAR EMETIC.—At a meeting of the regular medical profession of Cincinnati, called to consider the late Circular No. 6 of the Surgeon-General of the United States, in reference to the use of calomel and tartar emetic in the Army, a committee was appointed to report the sense of the profession on the subject. At a subsequent meeting, the committee reported, denying the truth of the statements on which the Surgeon-General's order was founded, charging him with the assumption of powers not belonging to his office, and ending with a resolution that his removal therefrom would meet the approbation of the profession, be of advantage to our soldiers, and creditable to the Government.—*Ibid.*

Editorial.

AMERICAN MEDICAL ASSOCIATION.

Notwithstanding the timidity of some, the open opposition and misrepresentations of others, and the disturbing influences of civil war, the recent meeting of the Association in this city was eminently successful. More than two hundred members were present, representing seventeen States and Territories; and among them some of the most eminent of the profession. As will be seen by the Record of Proceedings, contained in the present number of the *Examiner*, the attention of members was wholly absorbed with the proper business of the Association. Not a word or an act of a sectional or political character disturbed its deliberations; and no one deemed the *patriotism* of its members sufficiently *questionable* to require the adoption of special resolutions to bolster it up, or herald it to the world.

The great lack of reports from Special Committees was very well supplied by the voluntary communications of Drs. J. H. Griscom, H. G. Davis, and J. Homberger, of New York; and Drs. E. Andrews and A. Fisher, of Chicago. The two last-mentioned papers led to some interesting and profitable discussion, in which several members of the Association participated. There was a well-written and interesting Report from the Standing Committee, on Medical Education, by Dr. C. C. Cox, of Maryland. It was listened to with attention; and the resolutions appended to it, after a slight amendment, were adopted. The topic which elicited most discussion was the Surgeon-General's order, excluding calomel and tartarized antimony from the supply-table for the Medical Department of the Army. This topic, after receiving the careful consideration of a large committee, elicited an animated, though courteous and candid, discussion. The resolutions condemning the order and asking for its recision or withdrawal were passed, with but few dissenting voices. Our views on this subject are given in another page of this *Journal*. But no part of the doings of the recent meeting of the Associ-

ation afforded us, personally, as much satisfaction as the selection of officers for the ensuing year. It is well known that the Association, at an early period of its history, undesignedly adopted the *custom* of selecting the president from the place where the annual meeting was held. This custom, once established, as completely restricted the selection of candidates for the highest honors of the Association to the profession of a few large cities, as though all the rest were excluded by positive constitutional provisions. A custom so contrary to the national character of the organization, and so unjust to the greater part of the profession, met with early and continuous opposition from some of the warmest friends of the Association; and from none more decidedly than the editor of this *Journal.* From motives of delicacy, however, each successive nominating committee (with one exception,) followed the custom,—simply nominating whoever was recommended by the representatives of the local profession in the city where they were holding the meeting. Aside from the partiality and injustice of such a custom, it induced other evils of scarcely less magnitude. Thus, no sooner was a place selected for the next Annual Meeting, than every prominent member of the profession in that locality became suspected of being a candidate for the next presidency; and if the local profession did not actually split into factions,—each striving to bring its own favorite into a position for nomination, they were subject to the annoyance of being constantly so represented by half of the medical periodicals in the country. Impressed with the importance of breaking up such a custom, the following resolutions were presented to the meeting of the Illinois State Medical Society in the spring of 1859. They were laid on the table for further consideration. At the next annual meeting, in May, 1860, they were taken from the table, fully considered, and adopted by the Society with only two dissenting voices. Notwithstanding this action of the State Medical Society, in which representatives of all the Medical Societies and Colleges of this city participated, no sooner was this city selected as the place for an annual meeting, than the profession here was represented

as divided into factions, under the lead of two rival candidates for the presidency; and, if a medical journal, published in Louisville in the winter of 1860 and '61 was to be credited, these two parties were waging a fiercer war upon each other than that now carried on in *Rebeldom.*

It was in vain that we denied the existence of any such factions or candidates. Their existence continued to be alleged, and believed in, up to the hour of the recent meeting of the Association in this city. Indeed, so serious were these local feuds supposed to be, that some of the oldest members of the Association in Philadelphia, New York, and other distant cities, actually entertained fears for the welfare of the organization; and some professional *Ishmaelite*, who never had a truly *patriotic* idea in his head or impulse in his heart, even took the trouble to set afloat in the medical journals the wonderful idea, that the *loyalty* of some supposed candidate was not like the virtue of Cæsar's wife, entirely "above *suspicion.*" We can well imagine the surprise of the members of the Association, when, on their arrival in this city, they found one of the supposed candidates for the presidency so much engaged in projects for enlarging *canals* that he neither deigned to look at the Association nor to open the doors of his house for the reception of one of its members; while the greatest anxiety of the other was to get the following letter and resolutions fairly before the Nominating Committee in time, effectually to break up the only absurd custom which had fastened itself upon the annual doings of our national organization:—

CHICAGO, *June* 1*st*, 1863.

"To the Delegate on the Nominating Committee from Illinois:

"Dear Sir:—Enclosed you will find a series of Resolutions in relation to the custom of selecting a President for the American Medical Association from the place where the meeting is held, adopted by an almost unanimous vote of the Illinois State Medical Society, at the annual meeting in May, 1860.

"These Resolutions still stand as instructions to the Delegates from that Society. Should my name be mentioned in the

Nominating Committee as a candidate for President of the Association, you will confer a great favor on me by immediately presenting these Resolutions and this note, with the assurance that under no circumstances, can I permit myself to accept a nomination for the Presidency of the American Medical Association while the *custom* alluded to in the Resolutions is in force."

Yours truly.

N. S. DAVIS,

Permanent Sec'y of the Ill. State Med. Society.

"*Whereas*, The American Medical Association is a national Association, composed of delegates and members from all parts of the United States, meeting on terms of perfect equality:—

"Therefore, *Resolved*, That, in the opinion of this Society, all the officers of the Association should be selected strictly with reference to *merit*, and without any regard to their place of residence.

"*Resolved*, That the custom of selecting the President of the Association exclusively from the profession of the city in which the Annual Meeting is held, is not only derogatory to the general character of the organization, and calculated greatly to lessen the honor which should attach to that office, but past experience has shown that it leads directly to local divisions, jealousies, and injurious partisan strife.

"*Resolved*, That the delegates from this Society to the Association, be instructed to use their influence to abrogate the custom alluded to in the preceding resolution.

"*Resolved*, That the Secretary be directed to furnish copies of the foregoing resolutions to other State and Local Medical Societies, and ask their attention to the same."

The worthy representative on the Nominating Committee from Illinois performed his duty well, by presenting the documents at the right time, and thereby relieved the Committee from all feelings of delicacy, and compelled it to go to the profession at large for a candidate for its highest honor.

We thus had the extreme gratification of seeing the great American Medical Association again in active *harmonious* operation; of taking its members by the hand at our own fireside; and of striking the death-blow to a custom which we trust will never be revived.

Calomel and Tartarized Antimony in the Army.—No subject has recently elicited more discussion in the profession than the Order of the Surgeon-General, excluding calomel and tartar emetic from the supply-table of the Army. If, in a general revision of the list of medicines to be furnished on the requisition of army-surgeons, the Surgeon-General had simply omitted calomel, and tartrate of antimony and potassa, it would, probably, have attracted very little attention from the profession, generally. But the issuance of a special order, excluding these articles on the pretext that the first, especially, had been so grossly and generally abused by the medical officers of the Army, as to admit of no other mode of correction; and that recent improvements in pathology had rendered both unnecessary if not always hurtful, was, to say the least, not very modest in the Surgeon-General,—nor very complimentary to the medical staff over which he presides.

And, when we remember that a very large part of the present medical staff of the Army has been taken recently from the great mass of active practitioners throughout the country, it is not surprising that such an Order should excite general criticism. The attempt to correct the abuse of a remedial agent of acknowledged active qualities, by prohibiting its use, is so unphilosophical and absurd, that we confess to a feeling of chagrin at the thought, that one in the high and honorable position of Surgeon-General of the United States Army, should place himself on record in that position before the medical world. That he should go further, and, because some of the medical officers were represented to have abused these articles, therefore, publish to the world, substantially, that the whole medical staff of the United States Army were incapable of being safely trusted with the use of two of the oldest and most common articles of the *Materia Medica*, would be humiliating indeed, if it were not so manifestly rediculous. The pretence set up by those who attempt to defend the Surgeon-General, that, in excluding calomel, he did not intend to exclude all mercurials, but left still in the supply-table blue mass, hyrag. cum. creta, the corrosive chloride, and the iodides, only make the matter worse.

For certainly no intelligent practitioner will pretend that corrosive sublimate, the iodides of mercury, or even blue mass, are either more mild or uniform in their action on the human system, than calomel; or that medical officers can be safely trusted with the former, who are too ignorant or careless to manage the latter with safety to their patients. Without any reference to the merits or demerits of calomel and antimony as remedial agents in the treatment of disease, the reasons set forth in the order for this prohibition are so manifestly unjust and unphilosophical, that we can see but two ways by which the Surgeon-General can escape the well-merited contempt of the profession. One is by acknowledging that the Order was issued without due consideration, and promptly withdrawing it; and the other is by immediately publishing the actual statistics of *salivation* and *mercurial gangrene* in the army, specifying the regiments and hospitals in which the cases occurred, and also the statistics claimed to be in his office, demonstrating that tartar emetic, as well as calomel, can be advantageously dispensed with in the treatment of all diseases of the army.

If the Surgeon-General refuses to adopt the first course of action, the profession certainly have a right to demand the adoption of the latter.

Hospitality of the Profession in Chicago.—A correspondent of the *American Medical Times* writes concerning the hospitalities extended to members of the American Medical Association, during its recent session in this city, as follows:—

"I cannot close this letter without bearing testimony to the liberal and generous hospitality of our professional brethren of Chicago. Delightful evening entertainments were given by Drs. N. S. Davis, W. W. Allport, W. H. Byford, M. Parker, A. Groesbeck, W. Carr and Son, and J. P. Ross. These entertainments were well attended, not only by the delegation, but also by Chicago feminine beauties. Your correspondent is deeply indebted to the profession of Chicago, and their families, for many a happy hour. Yours,

Correspondent."

CHANCRES.—*By W. E. Bowman, M.D.*—Treatment of Soft Chancre.—Assuming that the reader is cognizant of the facts so briefly stated in the last two numbers of the *Lancet*, I need not dwell on the importance of a proper diagnosis of the different forms of chancre, before commenting on the treatment of them, which differs so widely.

Although mercury, taken internally, ends the cicatrization of hard chancre, it has no beneficial influence upon the chancer-oid, which remains stationary or even progresses after salivation.

The virus, resting in the sore itself and its underlying tissues, is only effectually destroyed by thorough cauterization.

Pernitrate of mercury.—Having been, invariably, successful with this form of caustic for the arrest of soft chancres, in my own practice, I place it "par excellence," first on the list. I prepare it by adding an ounce of red precipitate to an ounce and a-quarter of nitric acid, in which it readily dissolves by shaking. It is very painful when thoroughly applied, causing much inflammation; and, when the chancre is large, the effusion of serum into the cellular tissue of the prepuce. It has seldom to be employed but once, however, even in aggravated cases; nor have I ever noticed any injurious effect, hitherto, from its employment. Linseed poultices should be kept to the part until the inflammation subsides, and, afterwards, water-dressing; when the gray slough separates, which it does, generally, in three or four days, the healthy ulcer left, afterwards, must be treated in the usual way with wet lint and oiled silk; stimulating it with red wash or solution of the chlorate of potash, should the granulations become exhuberant. Collections of serum, formed after the operation, may be allowed to ooze away through punctures made into them with a needle.

Canquoin's paste.—Rollet and Diday assert that this caustic, composed of equal parts of chloride of zinc and flour, whilst exceedingly efficacious, gives but very little pain. It is made by drying the powdered chloride over a spirit-lamp before mixing it with dried flour, and adding alcohol drop by drop until the paste is formed, which is to be spread thinly on a cloth and again subjected to a gentle heat, a disc of this paste, corresponding in shape to the chancre and slightly exceeding in size, is cut out and retained upon the surface, previously cleansed of matter, from one to three hours, and, in large phagedenic ulcers, from four to six hours, the patient keeping his bed until the paste is removed.

Other caustics.—Nitric, strong acetic, and sulphuric acids,

caustic soda, potassa cum calce, and even the actual cautery or knife have their respective advocates. Dr. Bumstead, to whose work much of our former article was indebted, recommends the nitric acid in preference to all other applications, although he confesses that it sometimes requires to be repeated every second or third day.

When wrong to cauterize.—Thorough cauterization is inadmissible when chancroid extends deeply, and is situated directly over the urethra in either male or female, or in the vagina, when lying in contact with the bladder, rectum, or peritoneum, on account of the danger of an opening being created into these parts on the separation of the slough.—Again, cauterization is not applicable when the chancroid cannot be fully exposed as in phymosis, or when situated within the urethra, os uteri, &c., and would be useless unless every ulcer could be reached that would be likely to inoculate anew the eschar.

Nitrate of silver.—This is altogether too feeble in its action for universal adoption in cases of chancroid, but proves extremely useful in those enumerated that do not allow of a more powerful application. A comparative trial of the merits of the nitrate of silver and the solution of the pernitrate of mercury, would satisfy the most sceptical of the superiority of the latter, for the sore which has long remained stationary or even continued to extend, notwithstanding the constant use of the one, will be found to yield rapidly and cicatrize after a single thorough employment of the other.

Stimulating lotions.—These have the same influence upon a chancre as upon simple ulcers, and although they do not affect its specific character, do much good by keeping the pus removed as fast as it is secreted, and by coagulating the virus and hardening the adjacent tissues, prevent the inoculation of the surrounding parts and check the growth of the sore.

Among the many astringent and disinfecting lotions now in vogue, the following may be mentioned as some of those most frequently employed, viz.:—

℞. Zinci chlor. gr. j. aquæ ℥j. m.
℞. Liq. sodæ chlorinatæ ℥j. aquæ ℥ij. m.
℞. Ac. nitrici dil. ℥j. aquæ ℥viij. m.
℞. Tannin ℥ij. tinct. opii. ℥ss. aquæ ℥viij. m.

But the strength of these solutions must be adapted to the sensibility of the part, which varies in different cases, they should never be so strong as to excite pain or produce irritation, and indeed in many cases, when constant attention can be paid

to them, the lotion might as well consist entirely of water or glycerine.

The dressings should be kept covered with oiled silk, and renewed, in ordinary cases, as often as two or three times a day, that the discharges should not long remain in contact with the sore.

The black-wash, so much employed all over the world, is composed of two scruples of calomel and four ounces of lime-water. It is less cleanly and desirable than any of the forms above-mentioned.

Acetate of lead is objectionable, on account of its forming an insoluable albumenate of lead on the surface of the sore, which is with difficulty removed, and hides its progress.

Chancres beneath the prepuce, when it can be drawn back and examined, are often dressed with dry lint, which soon becomes sufficiently moistened by the natural secretion of the part.

Chancres of the frænum.—The frænum is particulary liable to be destroyed by chancre. When perforation takes place, the bridle should be cut and the raw surfaces cauterized. Diday recommends the separation to be made with a pair of scissors, which should be dull, these cut and cauterize at the same moment.

Urethral chancres.—The surfaces of urethral chancres, when near the meatus, should be kept separate by means of wet lint, which should be pushed down upon the sore with a probe, and have a thread attached to it to facilitate its withdrawal. When out of sight, the case must be treated as in gonorrhœa, by first subduing the inflammatory symptoms, by diet, rest, diluents, cathartic medicines, &c., and the employment of emollient urethral injections, afterwards resorting to those which are more powerful.

Phymosis.—If the chancroid be concealed by a tight and inflamed prepuce, free use should be made of the syringe, with tepid bathing of the part, which will not only keep the secretion from collecting, but also contribute materially to the reduction of the inflammation. When possible, a little dry lint may be passed up to the sore and allowed to remain for a few hours before removal. When the head of the penis is swollen and painful, it must be kept constantly buried in an emollient poultice or be fomented with infusion of poppy heads.

Iron, internally.—When soft chancres are slow in healing, Dr. Thompson remarks, that nothing appears to hasten cicatrization so much as a mild form of iron given internally, and

the potassio-tartrate appears to him to be the most successful in such cases; he prescribes it in doses of a scruple, in water, twice a day.—*Canada Lancet.*

ON THE TREATMENT OF CONSUMPTION BY THE HYPOPHOSPHITES.

To the Editor of *The Lancet:*

Sir:—Dr. Cotton's recent experiments are only a repetition of his former ones, with the time extended from a fortnight to a month. They are as invalid as the first.

He begins by asserting that the hypophosphites have no physiological action. If he will take an overdose, say four or five tablespoonfuls daily, of the syrup, he will soon find, to his very great discomfort, they produce such a state of plethora as to bring on epistaxis, or hæmoptysis, or bleeding from the intestines, either with or without symptoms of congestion towards the head or lungs. His principle is to give the hypophosphites for a month, then to leave them off to give some other substance, claiming for this second substance the merit of whatever improvement may continue after the suspension of the hypophosphites. This rests upon the assumption that the effect of the hypophosphites ceases as soon as the medicine is suspended, which is contrary to experience with regard to the action of all mineral substances assimilated by the organism. Upon the same principle, Dr. Cotton would have the right to conclude that if a patient who has been vaccinated begins by taking carbonate of soda immediately after, and continues it for some time, his immunity from small-pox would be owing to carbonate of soda, and not to vaccination.

The most elementary principle of experiment is to distinguish and isolate, as far as possible, the different conditions upon which the result of the experiment depends, so as to ascertain those which really contribute to the result, and those which do not. Dr. Cotton is, evidently, acquainted with this principle; for not only does he not apply it, but willfully and pre-determinately violates it in every one of his experiments. If his object had really been to ascertain the true value of the hypophosphites in the treatment of consumption, the simple, rational, logical, and scientific plan would have been to take a series of patients in certain determinate pathological conditions, and to treat them with the hypophosphites until death or cure ensued. During the same period another series of patients, selected as nearly as possible in the same pathological condition as the first, should be submitted to some other course of treatment. These two series of researches, if scientifically carried out,

would have afforded more data for comparison, and allowed of some definite conclusion. But, as Dr. Cotton's object was rather to play the part of advocate, and to find a plea against the efficacy of the hypophosphites, he has taken care to produce no well-defined and scientific results. He has, nevertheless, defeated the purpose he had in view, and produced a certificate in favor of the hypophosphites; for, according to his own showing, out of 12 cases (of which 2 are declared beforehand to be unpromising, thus reducing the number to 10), the hypophosphites were successful in 7 instances, producing improvement, and much improvement, and moderate improvement; the weight of the patients increasing in every instance, and in one or two to a great extent.

For the future, I would ask Dr. Cotton, before he institutes any further experiments in therapeutics, to bear in mind the following question:—How many negative results in experimental science, obtained under variable or unknown conditions, are sufficient to overthrow one single positive instance, the character and condition of which have been scientifically determined? When he has thought of this question in all its bearings, he will have a better right to come forward as a therapeutist; for such a mode of proceeding in therapeutics, as that followed by Dr. Cotton, appears to me to have no more claim to be a scientific experiment, than would be the fact of a man, ignorant of chemistry, going into a laboratory and throwing half-a-dozen of the first substances he met with into a crucible, and calling that a chemical experiment. The hypophosphites have proved themselves to any impartial observer, even, as I conceive, in the hands of Dr. Cotton himself, to be medicines of the highest importance. Men of scientific attainments and practical experience prescribe them, and will, I have no doubt, continue to prescribe them, to the relief of patients suffering from one of the most intractable of maladies which afflict humanity.

I remain, Sir, your obedient servant,

J. F. CHURCHILL.

Avenue, Montaigne, 1863.

—*London Lancet.*

IODIDE OF LIME.—A Substitute for Iodide of Potassium.—*By James R. Nichols, Chemist.*—The "Iodide of Lime," first introduced in 1855 by Dr. Puddock, a distinguished London physician, has been rapidly gaining favor among English practitioners, as a remedy of great value. It is used in those cases where iodide of potassium is indicated with more marked effects than usually attend the use of that salt. The success attending

its use has led us to prepare the article with much care; and also to present it in aqueous solution,—which is, perhaps, a preferable form. The lime and iodine are held together by a very feeble affinity, and the salt will not admit of exposure without evolving free iodine. The *solution* is a colorless and almost tasteless liquid, and remains permanent although long kept and exposed to the air.

Each drachm of the salt contains eight and a-half grains of iodine; and each fluid ounce of the solution contains half a grain of iodine. The iodine, *in the solution*, exists in the form of Iodide of Calcium and Iodate of Lime, thus:—$6CaO=6I+5CaI+CaO, IO^5$. Acids decompose the solution, and free the iodine; hence the utility of this form for the administration of iodine, probably, in the state of an oxide. The Iodide of Lime is superior to Iodide of Potassium in several particulars, as,

1.—The smallness of the dose, and the minute state of its atomic division. 2.—In not passing off so quickly through the kidneys. 3.—In its ready combination with the blood and tissues, manifested by its alterative effects. 4.—In being nearly tasteless, and, therefore, readily taken by children. 5.—In being much less expensive. 6.—In not producing either gastro-enteritic or vesical irritation.

Iodide of Potassium is an expensive remedy; and, on that account, many physicians refrain from using it. The Iodide of Lime being found to be more efficacious and much cheaper, will, doubtless, be substituted for it to a great extent. It has been used in England, with much success in throat diseases, in morbid conditions of the general system, in scrofulous affections, in intractable cases of neuralgia, in diseases caused by metallic poisons, etc. At the Bloomsbury Dispensary, England, it has been extensively prescribed for three years, with much success.

The dose of the salt is very small,—about one-fourth of a grain two or three times a day. Of the solution, two to four fluid drachms may be given as often. The salt is put up in ounce bottles, and the solution in pounds. The iodine in the solution is set free by adding a few drops of nitric, sulphuric, or hydrochloric acid. Druggists and physicians will please institute the experiment, that the presence of Iodine may be demonstrated in the clear solution. Physicians ordering our article, may rely upon its purity and accuracy of combination. Physicians should order the salt in one-ounce vials, and prepare the solution themselves. Directions accompany each vial.

MATERIA MEDICA AND HYGIENE IN THE UNIVERSITY OF BUFFALO.—We understand that Prof. Charles A. Lee, having completed his European tour and returned to this country, resumes the duties of his Professorship in the University of Buffalo, and will lecture at the approaching term upon *Materia Medica* and Hygiene.—*Buffalo Journal.*

DIPHTHERIA.—Dr. C. V. Moore, of Stillwater, N. J., writes:—"Diphtheria has been prevailing again, the type sthenic. It yields, pretty generally, under the administration of the sulphate of zinc, in emetic doses repeated every twenty-four or thirty-six hours, in conjunction with chlorate of potash and tincture of the chloride of iron. Pustulations, with croton oil to the neck, seemed decidedly beneficial, I have met with several cases that recovered unexpectedly, even after the extension of the disease to the larynx, accompanied by croupy cough." Dr. Moore speaks highly of the beneficial effects of the zinc emetics in these cases.—*Medical and Surgical Reporter.*

THE ACTION OF EXPECTORATION.—In a paper on this subject read at a recent meeting of the Glasgow Medical and Chirurgical Society, by Dr. W. T. Gairdner, he advanced the theory, that the bronchial tubes acted in a manner similar to that of the bowels, and ejected their contents by a peristaltic motion, which could as certainly be increased by appropriate medicines as could that of the bowels.—*London Lancet.*

ACADEMY OF MEDICINE, PARIS.—Professor Rokitansky has been elected a Foreign Associate by forty-two out of fifty-three voters present. The other candidates were Virchow, Frerichs, and Magnus Huss.—*London Lancet.*

VIVISECTION.—The deputation of the Society for the Prevention of Cruelty to Animals, which some time since waited on the Emperor Napoleon to protest against the practice of vivisection, have been rewarded by an ordinance of police, which places a check on this practice. The veterinary and anatomical schools are, therefore, expected to relinquish it entirely.—*London Lancet.*

CINCHONA IN JAVA.—The Dutch Government, having prohibited the culture of opium, has wisely favored the production of the cinchona, imposing upon the planters such regulations as are necessary to the preservation of the trees.—*Ibid.*

Rank of Naval Surgeons.—By a recent order, issued from the Navy Department, the following is to be the rank of surgeons in the navy:—

Surgeon of the Fleet to rank with Captain.

Surgeons to rank with Lieutenant-Commanders, for the first five years after promotion; after the first five years with Commanders; and after fifteen years to rank with Captains.

Passed Assistant-Surgeons to rank with Lieutenants.

Assistant-Surgeons to rank with Masters.—*Medical and Surgical Reporter.*

Diminished Death-rate in the Army.—From 1830 to 1836 the annual death-rate among the troops in the United Kingdom was 14 per 1000; in the years 1859-60 it was reduced to 5. During the same periods, the death-rate in the cavalry of the line was reduced from 15 to 6; in the royal artillery, from 15 to 7; in the foot guards, from 21 to 9; in the infantry of the line, from 17 to 8. A similar decrease is to be reported respecting the British troops in the Colonies.—*London Lancet.*

The Deaths in London in 1862 from all causes were 66,950, of which 34,133 were males, and 32,817 females. The greatest number occurred in the forty-eighth week, ending 29th of November, when they rose to 1,745. In that week the mean temperature of the air fell to 37·1°. The least number occurred in the twenty-eighth week, and was 1,065, when the mean temperature rose to 58·2°.—*London Lancet.*

Peruvian Physicians.—Dr. Markham, in his travels in Peru, describes the physicians as a wandering class. With their wallets of drugs on their backs and dressed in black britches, a red ponchof and broad-brimmed hat, they walk in direct line from village to village, as did their ancestors in the time of the Incas. It is remarkable that they should never have discovered the febrifugal qualities of the chinchona.—*London Lancet.*

A Cure for Fistula Lachrymalis.—M. Delore states, in the "Transections of the Societe des Sciences Medicales of Lyons," that in four cases out of nine, he succeeded in curing his patients by perforating the lachrymal bone, and placing in the cavity thus made a cone composed of arsenical paste. It is, however, difficult to say whether the perforation or the caustic ought to have the merit of the cure.—*London Lancet.*

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